

RECEIVED JUL 11 2001

BLUE CREEK RANCH
PLANNED UNIT DEVELOPMENT:
SKETCH PLAN

APPENDIX

July, 2001

LIST OF APPENDICES

- Appendix 1 Title Policy for Subject Site located at 3220 County Road 100, Carbondale Co.
- Appendix 2 June 22, 2001 Letter from Arthur J. Schiller authorizing Wind River Development Company LLC (applicant) and Davis Horn Incorporated to prepare and submit a land use application
- Appendix 3 June 25, 2001 letter from Mark Butler P.E., of Sopris Engineering
- Appendix 4 September 7, 2000 letter from Andrew Antipas addressing Wetlands
- Appendix 5 September 6, 2000 letter from Steve Dahmer of Nature Tech Consultant Services Corp. addressing Wildlife
- Appendix 6 June 13 and June 25, 2001 letters from Zancanella and Associates, Inc
- Appendix 7 The owners of properties within 200 feet of the subject site as listed in the Garfield County Assessor's Office records on September 11, 2000.
- Appendix 8 June 25, 2001 letter from Patrick & Stowell addressing the legal water supply.
- Appendix 9 Preliminary Geotechnical Study of Proposed Blue Creek Ranch Subdivision prepared by HP Geotech
- Appendix 10 September 7, 2000 letter from Patrick & Stowell which demonstrates legal access to the Blue Creek Ranch from County Road 100.
- Appendix 11 Colorado Division of Wildlife WRIS Data Checklist which provides an inventory of on site wildlife.
- Appendix 12 USDA Soil Conservation Service soil designations with interpretation tables.
- Appendix 13 Engineering Report and Site Application for the Blue Creek Ranch Wastewater Treatment Facility
- Appendix 14 Declaration of Covenants, Conditions and Restrictions for Blue Creek Ranch PUD

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Land Title Guarantee Company

Date: October 09, 2000

BLUE CREEK LAND HOLDINGS, LLC, A COLORADO LIMITED LIABILITY COMPANY
%LANE INDUSTRIES
ONE LANE CENTER 1200 SHERMER RD
NORTHBROOK, IL 60062
ARTHUR SCHILLER

Enclosed please find the title insurance policy for your property
located at 3220 COUNTY ROAD 100, CARBONDALE, CO 81623

Please review this policy in its entirety. In the event that you find any discrepancy, or if you have any questions
regarding your final title policy, you may contact Title Department

Phone: 970-945-2610 Fax: 970-945-4784

Please refer to our Order No. GW234155

Should you decide to sell the property described in this policy, or if you are required to purchase a new title
commitment for mortgage purposes, you may be entitled to a credit toward future title insurance premiums.
Land Title Guarantee Company will retain a copy of this policy so we will be able to provide future products
and services to you quickly and efficiently.

Thank you for giving us the opportunity to serve you.

Sincerely,

Land Title Guarantee Company

LTG Policy No. LTHH234155

Form AO/ORT

Our Order No. GW234155

Schedule A

Amount \$4,312,500.00

Property Address: 3220 COUNTY ROAD 100, CARBONDALE, CO 81623

1. Policy Date: September 29, 2000 at 5:00 P.M.

2. Name of Insured:

BLUE CREEK LAND HOLDINGS, LLC, A COLORADO LIMITED LIABILITY COMPANY

3. The estate or interest in the land described or referred to in this Schedule and which is covered by this policy is:

A Fee Simple

4. Title to the estate or interest covered by this policy at the date hereof is vested in:

BLUE CREEK LAND HOLDINGS, LLC, A COLORADO LIMITED LIABILITY COMPANY

5. The land referred to in this policy is described as follows:

SEE ATTACHED PAGE(S) FOR LEGAL DESCRIPTION

This Policy valid only if Schedule B is attached.

Land Title Guarantee Company
Representing Old Republic National Title Insurance Company

LTG Policy No. LTHH234155

Our Order No. GW234155

LEGAL DESCRIPTION

A PARCEL OF LAND SITUATED IN THE UNITED STATES GOVERNMENT LOTS 1, 2, 6, 7, 11 AND THE NORTHEAST QUARTER SOUTHWEST QUARTER OF SECTION 31, TOWNSHIP 7 SOUTH, RANGE 87 WEST OF THE SIXTH PRINCIPAL MERIDIAN, GARFIELD COUNTY, COLORADO, SAID PARCEL IS LOCATED SOUTHERLY OF COLORADO STATE HIGHWAY NO. 82, EASTERLY OF GARFIELD COUNTY ROAD 100 AND NORTHERLY OF THE DENVER AND RIO GRANDE WESTERN RAILROAD RIGHT-OF-WAY, AND IS MORE FULLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWESTERLY CORNER OF SAID GOVERNMENT LOT 2, SECTION 31, THENCE SOUTH 00 DEGREES 55'02" EAST, A DISTANCE OF 1197.02 FEET TO THE INTERSECTION OF SAID COUNTY ROAD 100 EASTERLY RIGHT-OF-WAY WITH THE SOUTHERLY RIGHT-OF-WAY OF COLORADO STATE HIGHWAY NO. 82, THE TRUE POINT OF BEGINNING;
THENCE EASTERLY ALONG SAID STATE HIGHWAY SOUTHERLY RIGHT-OF-WAY THE FOLLOWING:

NORTH 81 DEGREES 01'05" EAST, A DISTANCE OF 7.29 FEET TO THE POSITION FOR COLORADO DEPARTMENT OF TRANSPORTATION (CDOT), MONUMENT 529 OF PROJECT NO. CX(FC) 24-0082-26 (MISSING), (SAID POINT IS MARKED BY A WITNESS CORNER MONUMENT, A 5/8" STEEL ROD WITH YELLOW PLASTIC CAP MARKED BUETTNER 13166 WC, AT A DISTANCE OF NORTH 81 DEGREES 01'05" EAST, 2.00 FEET FROM THE CDOT MONUMENT POSITION, SAID WITNESS CORNER MONUMENT IS LOCATED AT THE BASE OF A WIRE FENCE);

THENCE NORTH 81 DEGREES 01'05" EAST, A DISTANCE OF 120.91 FEET TO A CDOT MONUMENT 530 OF SAID CDOT PROJECT;

THENCE NORTH 72 DEGREES 01'13" EAST, A DISTANCE OF 188.81 FEET TO THE CDOT MONUMENT 531 OF SAID PROJECT;

THENCE SOUTH 84 DEGREES 43'15" EAST, A DISTANCE OF 401.16 FEET TO THE CDOT MONUMENT 532 (MISSING NOW MARKED WITH A 5/8" STEEL ROD AND YELLOW PLASTIC CAP MARKED BUETTNER 13166), OF SAID PROJECT;

THENCE SOUTH 78 DEGREES 30'40" EAST, A DISTANCE OF 382.98 FEET TO A WIRE FENCE CORNER;

THENCE DEPARTING SAID STATE RIGHT-OF-WAY SOUTH 00 DEGREES 35'23" WEST, A DISTANCE OF 1834.33 FEET ALONG A WIRE FENCE TO A FENCE CORNER;

THENCE SOUTH 89 DEGREES 16'38" EAST, A DISTANCE OF 231.46 FEET TO A FENCE CORNER;

THENCE SOUTH 00 DEGREES 10' 42" EAST A DISTANCE OF EAST, A DISTANCE OF 785.71 FEET ALONG A WIRE FENCE TO A INTERSECTION WITH THE DENVER AND RIO GRANDE WESTERN RAILROAD NORTHERLY RIGHT-OF-WAY, SAID POINT OF INTERSECTION BEING WITHIN THE ROARING FORK RIVER;

THENCE WESTERLY ALONG SAID NORTHERLY RAILROAD RIGHT-OF-WAY, BEING LOCATED WITHIN THE ROARING FORK RIVER THE FOLLOWING:

SOUTH 80 DEGREES 27'41" WEST, A DISTANCE OF 230.73 FEET;

SOUTH 83 DEGREES 46'38" WEST, A DISTANCE OF 96.97 FEET;

SOUTH 84 DEGREES 11'43" WEST A DISTANCE OF 99.20 FEET;

SOUTH 84 DEGREES 12'11" WEST, A DISTANCE OF 99.74 FEET;

SOUTH 84 DEGREES 12'20" WEST, A DISTANCE OF 99.08 FEET;

SOUTH 84 DEGREES 12'45" WEST, A DISTANCE OF 103.09 FEET;

SOUTH 84 DEGREES 06'14" WEST, A DISTANCE OF 97.41 FEET;

SOUTH 84 DEGREES 09'08" WEST, A DISTANCE OF 100.70 FEET;

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LEGAL DESCRIPTION

SOUTH 84 DEGREES 53'34" WEST, A DISTANCE OF 96.53 FEET;
 SOUTH 86 DEGREES 56'14" WEST, A DISTANCE OF 93.61 FEET;
 NORTH 89 DEGREES 35'50" WEST, A DISTANCE OF 93.75 FEET;
 NORTH 86 DEGREES 21'01" WEST, A DISTANCE OF 94.46 FEET;
 NORTH 82 DEGREES 59'43" WEST, A DISTANCE OF 94.93 FEET;
 NORTH 79 DEGREES 59'43" WEST A DISTANCE OF 95.24 FEET;
 NORTH 77 DEGREES 47'12" WEST, A DISTANCE OF 97.04 FEET;
 NORTH 77 DEGREES 19'56" WEST, A DISTANCE OF 99.76 FEET;
 NORTH 77 DEGREES 10' 16" WEST, A DISTANCE OF 86.35 FEET TO AN INTERSECTION WITH
 THE EASTERLY RIGHT-OF-WAY OF GARFIELD COUNTY ROAD 100;
 THENCE NORTHERLY ALONG SAID EASTERLY RIGHT-OF-WAY THE FOLLOWING COURSES AND
 CURVES:
 THENCE NORTH 36 DEGREES 10' 38" EAST, A DISTANCE OF 92.37 FEET;
 THENCE ALONG A CURVE TO THE LEFT 145.86 FEET, THE RADIUS OF SAID CURVE BEING
 340.27 FEET, THE CENTRAL ANGLE IS 24 DEGREES 33' 37", THE CURVE LONG CHORD
 BEARS NORTH 24 DEGREES 23' 49" EAST, A DISTANCE OF 144.75 FEET;
 THENCE NORTH 12 DEGREES 07' 00" EAST, A DISTANCE OF 1490. 00 FEET;
 THENCE ALONG A CURVE TO THE LEFT 296.07 FEET, THE RADIUS OF SAID CURVE BEING
 1462.39 FEET, THE CENTRAL ANGLE IS 11 DEGREES 36' 00", THE CURVE LONG CHORD
 BEARS NORTH 06 DEGREES 19' 00" EAST, A DISTANCE OF 295.57 FEET;
 THENCE NORTH 00 DEGREES 30' 48" EAST, A DISTANCE OF 727.56 FEET TO THE TRUE
 POINT OF BEGINNING.

COUNTY OF GARFIELD
STATE OF COLORADO

Form AO/ORT

Our Order No. GW234155

Schedule B

This policy does not insure against loss or damage by reason of the following:

1. Rights or claims of parties in possession not shown by the public records.
2. Easements, or claims of easements, not shown by the public records.
3. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, and any facts which a correct survey and inspection of the premises would disclose and which are not shown by the public records.
4. Any lien, or right to a lien, for services, labor, or material theretofore or hereafter furnished, imposed by law and not shown by the public records.
5. TAXES FOR 2000 AND SUBSEQUENT YEARS ONLY, NOT YET DUE AND PAYABLE.
6. THE EFFECT OF INCLUSIONS IN ANY GENERAL OR SPECIFIC WATER CONSERVANCY, FIRE PROTECTION, SOIL CONSERVATION OR OTHER DISTRICT OR INCLUSION IN ANY WATER SERVICE OR STREET IMPROVEMENT AREA.
7. WATER RIGHTS OR CLAIMS TO WATER RIGHTS.
8. RIGHT OF PROPRIETOR OF A VEIN OR LODGE TO EXTRACT AND REMOVE HIS ORE THEREFROM SHOULD THE SAME BE FOUND TO PENETRATE OR INTERSECT THE PREMISES AS RESERVED IN UNITED STATES PATENT RECORDED AUGUST 11, 1894, IN BOOK 12 AT PAGE 333 AND RECORDED FEBRUARY 19, 1915 IN BOOK 71 AT PAGE 603.
9. RIGHT OF WAY FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES AS RESERVED IN UNITED STATES PATENT RECORDED AUGUST 11, 1894, IN BOOK 12 AT PAGE 333 AND RECORDED FEBRUARY 19, 1915 IN BOOK 71 AT PAGE 603.
10. EASEMENTS AND RIGHTS OF WAY AS GRANTED TO HOLY CROSS ELECTRIC IN INSTRUMENT RECORDED FEBRUARY 18, 1972 IN BOOK 427 AT PAGE 292 AND RECORDED OCTOBER 30, 1984 IN BOOK 659 AT PAGE 260.
11. EASEMENTS AND RIGHTS OF WAY AS GRANTED TO ROCKY MOUNTAIN NATURAL GAS IN INSTRUMENT RECORDED OCTOBER 19, 1961 IN BOOK 337 AT PAGE 236.
12. EASEMENTS AND RIGHTS OF WAY FOR PIPELINE AS CONTAINED IN INSTRUMENT RECORDED MARCH 14, 1962 IN BOOK 340 AT PAGE 26.

Our Order No. GW234155

Schedule B

13. RESTRICTIVE COVENANTS, WHICH DO NOT CONTAIN A FORFEITURE OR REVERTER CLAUSE, BUT OMITTING ANY COVENANT OR RESTRICTION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN UNLESS AND ONLY TO THE EXTENT THAT SAID COVENANT (A) IS EXEMPT UNDER CHAPTER 42, SECTION 3607 OF THE UNITED STATES CODE OR (B) RELATES TO HANDICAP BUT DOES NOT DISCRIMINATE AGAINST HANDICAPPED PERSONS, AS CONTAINED IN INSTRUMENT RECORDED APRIL 07, 1969, IN BOOK 401 AT PAGE 28.
14. TERMS, CONDITIONS AND PROVISIONS OF EASEMENT AGREEMENT RECORDED APRIL 22, 1980 IN BOOK 547 AT PAGE 284.
15. ALL ACCESS RIGHTS TO HIGHWAY NO. 82 AS CONTAINED IN RULE AND ORDER RECORDED FEBRUARY 28, 1995 IN BOOK 932 AT PAGE 775.
16. EASEMENTS AND RIGHTS OF WAY FOR THE BASIN DITCH AND THE MIDDLE DITCH AND ALL LATERALS THEREOF.
17. ANY QUESTION, DISPUTE OR ADVERSE CLAIMS AS TO ANY LOSS OR GAIN OF LAND AS A RESULT OF ANY CHANGE IN THE RIVER BED LOCATION BY NATURAL OR OTHER THAN NATURAL CAUSES, OR ALTERATION THROUGH ANY CAUSE, NATURAL OR UNNATURAL, OF THE CENTER THREAD, BANK, CHANNEL OR FLOW OF WATERS IN THE ROARING FORK RIVER LYING WITHIN SUBJECT LAND; AND ANY QUESTION AS TO THE LOCATION OF SUCH CENTER THREAD, BED, BANK OR CHANNEL AS A LEGAL DESCRIPTION MONUMENT OR MARKER FOR PURPOSES OF DESCRIBING OR LOCATING SUBJECT LANDS.
18. EASEMENTS AND RIGHTS OF WAY FOR COUNTY ROAD 100.
19. EASEMENTS, RIGHTS OF WAY AND OTHER MATTERS AS SHOWN ON THE SURVEY PLAT DATED AUGUST 27, 2000 PREPARED BY LOUIS BUETTNER.

Owner's Policy

No. LTG Policy LTHH234153

American Land Title Association Owner's Policy 10-17-92



SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS AND STIPULATIONS,

OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, a Minnesota corporation, herein called the Company, insures, as of Date of Policy shown in Schedule A, against loss or damage, not exceeding the Amount of Insurance stated in Schedule A, sustained or incurred by the insured by reason of:

1. Title to the estate or interest described in Schedule A being vested other than as stated therein;
2. Any defect in or lien or encumbrance on the title;
3. Unmarketability of the title;
4. Lack of a right of access to and from the land.

The Company will also pay the costs, attorneys' fees and expenses incurred in defense of the title, as insured, but only to the extent provided in the Conditions and Stipulations.

IN WITNESS WHEREOF, the said Old Republic National Title Insurance Company has caused its corporate name and seal to be hereunto affixed by its duly authorized officers as of the date shown in Schedule A, the policy to be valid when countersigned by an authorized officer or agent of the Company.

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including, but not limited to, building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
 - (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims, or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or creating subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (a) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or
 - (b) the transaction creating the estate or interest insured by this policy being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

Issued through the Office of:

LAND TITLE GUARANTEE COMPANY
817 COLORADO AVENUE
SUITE 203
GLENWOOD SPRINGS, COLORADO 81602
303945-2610

Thomas E. Schuman
Authorized Signatory

OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
A Stock Company
400 Second Avenue South, Minneapolis, Minnesota 55401
(612) 371-1111

By *[Signature]* President
Attest *[Signature]* Secretary

CONDITIONS AND STIPULATIONS

1. Definition of Terms.

The following terms when used in this policy mean:

- (a) "insured": the insured named in Schedule A, and, subject to any rights or defenses the Company would have had against the named insured, those who succeed to the interest of the named insured by operation of law as distinguished from purchase including, but not limited to, heirs, distributees, devisees, survivors, personal representatives, next of kin, or corporate or fiduciary successors.
- (b) "insured claimant": an insured claiming loss or damage.
- (c) "knowledge" or "known": actual knowledge, not constructive knowledge or notice which may be imputed to an insured by reason of the public records as defined in this policy or any other records which impart constructive notice of matters affecting the land.
- (d) "land": the land described or referred to in Schedule A, and improvements affixed thereto which by law constitute real property. The term "land" does not include any property beyond the lines of the area described or referred to in Schedule A, nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways, but nothing herein shall modify or limit the extent to which a right of access to and from the land is insured by this policy.
- (e) "mortgage": mortgage, deed of trust, trust deed, or other security instrument.
- (f) "public records": records established under state statutes at Date of Policy for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without knowledge. With respect to Section 1(a)(iv) of the Exclusions from Coverage, "public records" shall also include environmental protection liens filed in the records of the clerk of the United States District Court for the district in which the land is located.
- (g) "unmarketability of the title": an alleged or apparent matter affecting the title to the land, not excluded or excepted from coverage, which would entitle a purchaser of the estate or interest described in Schedule A to be released from the obligation to purchase by virtue of a contractual condition requiring the delivery of marketable title.

2. Continuation of Insurance After Conveyance of Title.

The coverage of this policy shall continue in force as of Date of Policy in favor of an insured only so long as the insured retains an estate or interest in the land, or holds an indebtedness secured by a purchase money mortgage given by a purchaser from the insured, or only so long as the insured shall have liability by reason of covenants of warranty made by the insured in any transfer or conveyance of the estate or interest. This policy shall not continue in force in favor of any purchaser from the insured of either (i) an estate or interest in the land, or (ii) an indebtedness secured by a purchase money mortgage given to the insured.

3. Notice of Claim to be Given by Insured Claimant.

The insured shall notify the Company promptly in writing (i) in case of any litigation as set forth in Section 4(a) below, (ii) in case knowledge shall come to an insured hereunder of any claim of title or interest which is adverse to the title to the estate or interest, as insured, and which might cause loss or damage for which the Company may be liable by virtue of this policy, or (iii) if title to the estate or interest, as insured, is rejected as unmarketable. If prompt notice shall not be given to the Company, then as to the insured all liability of the Company shall terminate with regard to the matter or matters for which prompt notice is required; provided, however, that failure to notify the Company shall in no case prejudice the rights of any insured under this policy unless the Company shall be prejudiced by the failure and then only to the extent of the prejudice.

4. Defense and Prosecution of Actions; Duty of Insured Claimant to Cooperate.

(a) Upon written request by the insured and subject to the options contained in Section 6 of these Conditions and Stipulations, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an insured in litigation in which any third party asserts a claim adverse to the title

or interest as insured, but only as to those stated causes of action alleging a defect, lien or encumbrance or other matter insured against by this policy. The Company shall have the right to select counsel of its choice (subject to the right of the insured to object for reasonable cause) to represent the insured as to those stated causes of action and shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs or expenses incurred by the insured in the defense of those causes of action which allege matters not insured against by this policy.

(b) The Company shall have the right, at its own cost, to institute and prosecute any action or proceeding or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest, as insured, or to prevent or reduce loss or damage to the insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this policy. If the Company shall exercise its rights under this paragraph, it shall do so diligently.

(c) Whenever the Company shall have brought an action or interposed a defense as required or permitted by the provisions of this policy, the Company may pursue any litigation to final determination by a court of competent jurisdiction and expressly reserves the right, in its sole discretion, to appeal from any adverse judgment or order.

(d) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, and all appeals therein, and permit the Company to use, at its option, the name of the insured for this purpose. Whenever requested by the Company, the insured, at the Company's expense, shall give the Company all reasonable aid (i) in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act which in the opinion of the Company may be necessary or desirable to establish the title to the estate or interest as insured. If the Company is prejudiced by the failure of the insured to furnish the required cooperation, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

5. Proof of Loss or Damage.

In addition to and after the notices required under Section 3 of these Conditions and Stipulations have been provided the Company, a proof of loss or damage signed and sworn to by the insured claimant shall be furnished to the Company within 90 days after the insured claimant shall ascertain the facts giving rise to the loss or damage. The proof of loss or damage shall describe the defect in, or lien or encumbrance on the title, or other matter insured against by this policy which constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage. If the Company is prejudiced by the failure of the insured claimant to provide the required proof of loss or damage, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such proof of loss or damage.

In addition, the insured claimant may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of Policy, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the insured claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All

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information designated as confidential by the insured claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the insured claimant to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in this paragraph shall terminate any liability of the Company under this policy as to that claim.

6. Options to Pay or Otherwise Settle Claims; Termination of Liability.

In case of a claim under this policy, the Company shall have the following additional options:

(a) To Pay or Tender Payment of the Amount of Insurance.

To pay or tender payment of the amount of insurance under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant, which were authorized by the Company, up to the time of payment or tender of payment and which the Company is obligated to pay.

Upon the exercise by the Company of this option, all liability and obligations to the insured under this policy, other than to make the payment required, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, and the policy shall be surrendered to the Company for cancellation.

(b) To Pay or Otherwise Settle With Parties Other Than the Insured or With the Insured Claimant.

(i) to pay or otherwise settle with other parties for or in the name of an insured claimant any claim insured against under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay; or

(ii) to pay or otherwise settle with the insured claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in paragraphs (b)(i) or (ii), the Company's obligations to the insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation.

7. Determination, Extent of Liability and Coinsurance.

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the insured claimant who has suffered loss or damage by reason of matters insured against by this policy and only to the extent herein described.

(a) The liability of the Company under this policy shall not exceed the least of:

(i) the Amount of Insurance stated in Schedule A; or,

(ii) the difference between the value of the insured estate or interest as insured and the value of the insured estate or interest subject to the defect, lien or encumbrance insured against by this policy.

(b) In the event the Amount of Insurance stated in Schedule A at the Date of Policy is less than 80 percent of the value of the insured estate or interest or the full consideration paid for the land, whichever is less, or if subsequent to the Date of Policy an improvement is erected on the land which increases the value of the insured estate or interest by at least 20 percent over the Amount of Insurance stated in Schedule A, then this policy is subject to the following:

(i) where no subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that the amount of insurance at Date of Policy bears to the total value of the insured estate or interest at Date of Policy; or

(ii) where a subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that 120 percent of the Amount of Insurance stated in Schedule A bears to the sum of the Amount of Insurance stated in Schedule A and the amount expended for the improvement.

The provisions of this paragraph shall not apply to costs, attorneys' fees

and expenses for which the Company is liable under this policy, and shall only apply to that portion of any loss which exceeds, in the aggregate, 10 percent of the Amount of Insurance stated in Schedule A.

(c) The Company will pay only those costs, attorneys' fees and expenses incurred in accordance with Section 4 of these Conditions and Stipulations.

8. Apportionment.

If the land described in Schedule A consists of two or more parcels which are not used as a single site, and a loss is established affecting one or more of the parcels but not all, the loss shall be computed and settled on a pro rata basis as if the amount of insurance under this policy was divided pro rata as to the value on Date of Policy of each separate parcel to the whole, exclusive of any improvements made subsequent to Date of Policy, unless a liability or value has otherwise been agreed upon as to each parcel by the Company and the insured at the time of the issuance of this policy and shown by an express statement or by an endorsement attached to this policy.

9. Limitation of Liability.

(a) If the Company establishes the title, or removes the alleged defect, lien or encumbrance, or cures the lack of a right of access to or from the land, or cures the claim of unmarketability of title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

(b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title as insured.

(c) The Company shall not be liable for loss or damage to any insured for liability voluntarily assumed by the insured in settling any claim or suit without the prior written consent of the Company.

10. Reduction of Insurance; Reduction or Termination of Liability.

All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance pro tanto.

11. Liability Non-cumulative.

It is expressly understood that the amount of insurance under this policy shall be reduced by any amount the Company may pay under any policy insuring a mortgage to which exception is taken in Schedule B or to which the insured has agreed, assumed, or taken subject, or which is hereafter executed by an insured and which is a charge or lien on the estate or interest described or referred to in Schedule A, and the amount so paid shall be deemed a payment under this policy to the insured owner.

12. Payment of Loss.

(a) No payment shall be made without producing this policy for endorsement of the payment unless the policy has been lost or destroyed, in which case proof of loss or destruction shall be furnished to the satisfaction of the Company.

(b) When liability and the extent of loss or damage has been definitely fixed in accordance with these Conditions and Stipulations, the loss or damage shall be payable within 30 days thereafter.

13. Subrogation Upon Payment or Settlement.

(a) The Company's Right of Subrogation.
Whenever the Company shall have settled and paid a claim under this policy, all right of subrogation shall vest in the Company unaffected by any act of the insured claimant.

The Company shall be subrogated to and be entitled to all rights and remedies which the insured claimant would have had against any person or property in respect to the claim had this policy not been issued. If requested by the Company, the insured claimant shall transfer to the Company all rights and

(Continued on back cover.)

(Continued from inside cover.)

remedies against any person or property necessary in order to perfect this right of subrogation. The insured claimant shall permit the Company to sue, compromise or settle in the name of the insured claimant and to use the name of the insured claimant in any transaction or litigation involving these rights or remedies.

If a payment on account of a claim does not fully cover the loss of the insured claimant, the Company shall be subrogated to these rights and remedies in the proportion which the Company's payment bears to the whole amount of the loss.

If loss should result from any act of the insured claimant, as stated above, that act shall not void this policy, but the Company, in that event, shall be required to pay only that part of any losses insured against by this policy which shall exceed the amount, if any, lost to the Company by reason of the impairment by the insured claimant of the Company's right of subrogation.

(b) The Company's Rights Against Non-insured Obligors.

The Company's right of subrogation against non-insured obligors shall exist and shall include, without limitation, the rights of the insured to indemnities, guaranties, other policies of insurance or bonds, notwithstanding any terms or conditions contained in those instruments which provide for subrogation rights by reason of this policy.

14. Arbitration.

Unless prohibited by applicable law, either the Company or the insured may demand arbitration pursuant to the Title Insurance Arbitration Rules of the American Arbitration Association. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. All arbitrable matters when the Amount of Insurance is \$1,000,000 or less shall be arbitrated at the option of either the Company or the insured. All arbitrable matters when the Amount of Insurance is in excess of \$1,000,000 shall be arbitrated only when agreed to by both the Company and the insured. Arbitration pursuant to this policy and under the Rules in effect on the date the

demand for arbitration is made or, at the option of the insured, the Rules in effect at Date of Policy shall be binding upon the parties. The award may include attorneys' fees only if the laws of the state in which the land is located permit a court to award attorneys' fees to a prevailing party. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

The law of the situs of the land shall apply to an arbitration under the Title Insurance Arbitration Rules. A copy of the Rules may be obtained from the Company upon request.

15. Liability Limited to this Policy; Policy Entire Contract.

(a) This policy together with all endorsements, if any, attached hereto by the Company is the entire policy and contract between the insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.

(b) Any claim of loss or damage, whether or not based on negligence, and which arises out of the status of the title to the estate or interest covered hereby or by any action asserting such claim, shall be restricted to this policy.

(c) No amendment of or endorsement to this policy can be made except by a writing endorsed hereon or attached hereto signed by either the President, a Vice President, the Secretary, an Assistant Secretary, or Validating Officer or Authorized Signatory of the Company.

16. Severability.

In the event any provision of the policy is held invalid or unenforceable under the applicable law, the policy shall be deemed not to include that provision and all other provisions shall remain in full force and effect.

17. Notices, Where Sent.

All notices required to be given the Company and any statement in writing required to be furnished the Company shall include the number of this policy and shall be addressed to its Home Office: 400 Second Avenue South, Minneapolis, Minnesota 55401, (612) 371-1111.

BLUE CREEK LAND HOLDINGS, LLC

ONE LANE CENTER, 1200 SHERMER ROAD, NORTHBROOK, ILLINOIS 60062-4561
847-498-6789 FACSIMILE: 847-496-2104

June 22, 2001

Mr. Mark Bean, Senior Planner
Garfield County
109 8th Street, Suite 303
Glenwood Springs, CO 81601

Dear Mr. Bean:

This letter authorizes WindRiver Development LLC & Davis Horn, Inc., to submit the Blue Creek Ranch PUD Land Use Application and to represent Blue Creek Land Holdings, LLC in the Land Use Review Process.

Yours truly,

Blue Creek Land Holdings, LLC

By: Lane Industries, Inc., its sole Manager

By: 
Arthur J. Schiller
Senior Vice President, Secretary and General Counsel
Direct Dial (voice): 847-291-5703
Direct Dial (facsimile): 847-291-5803
Mobile: 847-778-5703
Electronic Mail: schiller@laneind.com

June 25, 2001

Davis Horn Incorporated
215 South Monarch, Suite 104
Aspen, CO 81611

Re: Engineer's Report
Blue Creek Ranch Subdivision, Sketch Plan and PUD
SE Job No. 20089.01

Dear Glen:

This letter comprises an engineering report for the Sketch Plan and PUD Application to Garfield County.

Introduction

The site is approximately 82 acres covering the area north of the Roaring Fork River, south of State Highway 82 and directly east of County Road 100. The northern third of the property is generally flat open sprinkler irrigated pasture. The center third is partially developed including one home site with several out buildings that have access off County Road 100, a small livestock corral, and a 1.65-acre pond. The southern third is generally wetlands, drainage ditches, grassy open space and covered treed areas. The site generally drains to the southwest at approximately a 1.0% slope. A portion of the southern third of the property lies within the 100-year flood plain.

The proposed site includes forty-six dwelling units. Forty single-family home sites including the existing house and barns would be developed on the southern half, in the existing open areas. Six affordable housing multifamily units are proposed along the west edge of the property just south of the open space. Buildable areas were designed to be outside the 100-year flood plain and wetlands.

Water Supply

A central water distribution system is proposed. An agreement is under negotiation with Aspen Equestrian Estates to join into their water system, which has sufficient well capacity to serve both projects and a tank with sufficient storage for required fire flow for both projects. Any water system would be designed to meet the requirements of Garfield County and the State of Colorado.

Sanitary Sewer System

A centralize sewage waste water disposal system is proposed for the project. We are pursuing two possible avenues for sewage treatment. We have filed a site application for a sewage treatment plant. A copy of the application prepared by Zancanella & Associates Inc. will address the waste water system in more detail is included in a separate report. We are also under negotiation with the Ranch at Roaring Fork pursuing the possibility of tying into their sewage treatment system.

502 Main Street • Suite A3 • Carbondale, CO 81623 • (970) 704-0311 • Fax (970) 704-0313

SOPRIS ENGINEERING • LLC

civil consultants

APPENDIX 3

Utilities

Jeff Franke
Holy Cross Energy
3799 Hwy 82
Glenwood Springs, CO 81601

(970) 945-5491

Overhead three phase electric lines are available along the north and the east property lines. The on site electric serving the project would be constructed underground along prescribed easements. Holy Cross submitted a letter on June 8, 2001 stating that they will deliver power to the property upon the completion of the appropriate agreements.

Gary Evans
Kinder Morgan Energy
96 County Road 160
Glenwood Springs, CO 81601

(970) 928-0405

Underground gas lines are available along the north and the east property lines. The on site gas lines serving the project would be constructed underground along prescribed easements.

Mike Johnson
AT&T Cable Services
1605 Grand Avenue
Glenwood Springs, CO 81601

(970) 945-2804

The AT&T cable is currently located overhead along County Road 100 and Old Hwy 82. All cable lines on site will be installed underground. AT&T Cable submitted a letter and map on May 31, 2001 indicating the node locations along the west property line where cable can be accessed.

Qwest
ALDA Group
Developer Contact Group
P.O. Box 1720
Denver, CO 80201

1-800-526-3557

Location of existing Telephone service is under investigation. Our information indicates that we will be able to tie into telephone along County Road 100.

Drainage

The northern half of the site generally drains to the pond in the central of the property or to the western property line. The outlet of the pond drains to the wetlands area directly south of the pond. The wetlands drain to the west at about 0.5% slope. County Road 100 forms a barrier to the west forcing the drainage to the south along the road to a 2.8' by 6' box culvert under County Road 100. The storm water on the southern half of the site collects in the irrigation ditches that flank the low laying pasture and wetland areas. The drainage runs south and west toward the Roaring Fork River on the south end of the property or through one of two culverts under County Road 100.

The proposed development will have no or very little impact on the historical drainage patterns. Irrigation and drainage ditches will be maintained. Any required retention/detention to attenuate the difference in post development runoff and pre development runoff will be accomplished by using the pond or wetlands for detention and percolation.

Actual storm water and snowmelt volumes from offsite will be minor, however all flows will be routed to follow historic drainage paths. Compliance with Garfield County Regulations regarding drainage will be adhered to. The future design grading and drainage plans documents will insure that the contractor use best management practices to insure that any potential erosion or sedimentation is prevented.

Road Design

Site access to the proposed project would be provided near the existing entrance to the existing house. This existing entrance will be moved to align with the Aspen Equestrian Estates entrance. One additional entrance would be added off County Road 100 approximately 550 feet south of the existing entrance directly across from the Blue Creek ranch subdivision. One driveway entrance is proposed on the north end of the property off Old Hwy 82. The main road through the site will connect the two entrances accessing County Road 100. The majority of the lots will obtain access directly off of this looped road. On site roads would be classified as Rural Access with a minimum lane width of 11 feet. The proposed on site roads would be chip and seal surface. All road designs would meet the Garfield County Street and Roadway design standards and Garfield fire codes. The Preliminary Plan will detail and specify all road designs.

If you have any questions or need any additional information please give us a call.

Sincerely,
SOPRIS ENGINEERING



Mark A. Butler, P.E.
Project Engineer

Cc; Rob Cummings

Andrew Antipas
Ecological & Environmental Consulting, LLC



9/7/00

Mr. Glenn Horn
Davis Horn, Inc.
215 South Monarch
Aspen, CO 81611

Reference: Wetland Investigation and Delineation of Blue Creek Ranch

Dear Mr. Horn,

A wetland investigation and delineation was completed at Blue Creek Ranch by Andrew Antipas Ecological & Environmental Consulting, LLC on August 8, 2000. Approximately 5.4 acres of jurisdictional wetlands were delineated within the limits of the project area. In addition to vegetated wetlands Blue Creek and the pond are considered "Waters of the United States" and fall under the Army Corps of Engineers jurisdiction.

Wetlands are typically defined as areas that under normal circumstances support hydrophytic vegetation, have hydric soils, and wetland hydrology. The Army Corps of Engineers (ACOE) is the regulatory agency that has jurisdiction over wetlands. The ACOE reviews wetland delineations, issues permits, and insures that Section 404 of the Clean Water Act is adhered to. It is the responsibility of the Project Sponsor to determine if wetlands are present and to acquire the necessary permits from the ACOE if impacts are unavoidable.

Methods

The routine criteria as described in the Army Corps of Engineers 1987 Delineation Manual (Environmental Laboratory, 1987) was used to identify and delineate the wetlands on site. The 1987 manual utilizes the three parameters of vegetation, soils, and hydrology to identify and delineate wetlands, and requires that these parameters be determined during the growing season. Classification of wetlands follows Cowardin et al. (1979).

Weber's Colorado Flora of the Western Slope (1987) was the primary taxonomic reference, and plant species nomenclature and wetland indicator status follow Reed (1988) for the intermountain region (Region 8).

Hydrophytic (wetland) species are those with an indicator status of OBL (obligate wetland), FACW (facultative wetland), or FAC (facultative). Species listed as FACU (facultative upland) or UPL (obligate upland) generally do not occur in wetlands. Some species are not considered to be reliable indicators of wetland or upland conditions; these are marked NI (no indicator).

The wetlands identified in this report are hydrologically connected to Blue Creek which crosses the study site. The wetlands on Blue Creek Ranch are positioned to filter sheet flow during rain storms and spring snow melt which exceed the banks of Blue Creek. This filtering removes sediment and nutrients, reducing soil erosion and enhances water quality of neighboring streams and rivers.

Some of the wetlands on the eastern edge of the property are in a slight depression and may contribute to groundwater recharge which maintaining water levels in the drainage of Blue Creek, which is ultimately connected to the Roaring Fork and Colorado River Drainages.

The cumulative worth of all wetlands and their contribution to the regional environment cannot be overstated. However, it is apparent that this area has been regularly disturbed for over 100 years as a result agriculture activities. Wetlands identified in this report, have a moderate to high value to wildlife and society.

Summary

Seasonally saturated palustrine emergent wetlands are present within study area. These wetlands are hydrologically connected to Blue Creek. Blue Creek and the pond are "Waters of the United States" and fall under the jurisdiction of the Army Corps of Engineers.

If it is determined that the proposed project will disturb wetlands, a Department of the Army Section 404 permit and State water quality certificate (Section 401) will be needed. Therefore, it is recommended that a pre-application conference be held with the Army Corps of Engineers to review the proposed project prior to submitting the permit application.

If you have any questions or require additional information please do not hesitate to call. Thank you for the opportunity to provide ecological consulting services.

Very truly yours,



Andrew Antipas, manager

Literature Cited

Alstatt, D.K., and D. Moreland. 1992. Soil Survey of Aspen-Gypsum Area, Colorado. US Department of Agriculture, Soil Conservation Service. 260pp + appendices.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe, 1979. Classification of Wetlands and Deepwater Habitats of the United States. US Department of the

Interior, Fish and Wildlife Service, Biological Services Program FWS/OBS-79/31, 103 pp.

Environmental Laboratory. 1987 Corps of Engineers Wetland Delineation Manual. Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, MS.

Kollmorgen Corporation. 1994. Munsell Soil Color Charts. Macbeth Division of Kollmorgen Corporation. New Windsor, NY.

Reed, P., Jr., 1988. National List of Plant Species That Occur in Wetlands: Intermountain (Region 8). US Fish and Wildlife Service Biological Report.

Webber, WW., 1987. Colorado Flora: Western Slope. Colorado Associated University Press. Boulder, Colorado. 530pp.

Field Investigator(s): HATIPAS Date: 8-8-00

Project/Site: Blue Creek Ranch Sample ID:

State: CO County: Garfield Township:

Sample Location (Descriptive): Blue Creek Passes through site which feeds pond

Check Primary Wetland Definition Guidance Manual: 1989 Federal Interagency Method 1987 Corps of Engineers Method
 Has the Plant Community, Soils, or Hydrology Been Disturbed? Yes No
 Do Normal Environmental Conditions Prevail at this Sample Location? Yes No
 Is the area a potential problem area? Yes No
 Describe Disturbance / Problematic Features:

Cattle Grazing, irrigation ditches

DOMINANT VEGETATION

PLANT SPECIES	IND. ST.	STR.	PLANT SPECIES	IND. ST.	STR.
1. <i>Typha</i> spp	OBL	herb	6. <i>Rumex crispus</i>	FACW	herb
2. <i>Carex aquatilis</i>	OBL	herb	7. <i>Populus angustifolia</i>	FAC	tree
3. <i>C. canadensis</i>	OBL	herb	8. <i>Salix exigua</i>	OBL	shrub
4. <i>Alnus incana</i>	FACW	shrub	9. <i>Picea pungens</i>	FAC-	tree
5. <i>Cornus stolonifera</i>	FACW	shrub	10. <i>Heracleum lanatum</i>	FAC	herb

Percentage OBL, FACW, or FAC species (excluding FAC-) Results of FAC-neutral Test

SOILS

Mapped Series/Phase: Redrob loam 1-6% Taxonomic Subgroup:

Horizon / Depth	Matrix Color (moist)	Mottle Color (moist)	Mottle Abundance/Contrast
0-9.	5 YR 3/2	5 YR 4/6	common, med, distinct
10-14	5 YR 4/2	5 YR 4/6	few, med, faint

- | | |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Mapping unit listed on a local hydric soil list? | <input type="checkbox"/> Mapping unit listed on the national hydric soil list? |
| <input type="checkbox"/> Histic epipedon present? | <input type="checkbox"/> Sesquioxide Concretions? |
| <input type="checkbox"/> Sulfidic Odor? | <input type="checkbox"/> High Organic A-horizon in Sandy Soils? |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma colors? | <input type="checkbox"/> Organic Streaking / Spodic Horizon? |
| <input type="checkbox"/> Mapped Series/Phase Confirmed in Field? | <input type="checkbox"/> Aquic/peraquic moisture regime? |

Remarks: wetlands associated w/ blue creek and pond

HYDROLOGY

Depth of ground surface inundation (inches) VARIABLE Depth to Free Standing Water in Soil Pit (inches) SURFACE
 Primary Indicators: Secondary Indicators (2 or more required):

- | | |
|------------------------------------------------------------------|-----------------------------------------------------------------|
| <input checked="" type="checkbox"/> Observed Inundation | <input type="checkbox"/> Oxidized Rhizospheres within 12 inches |
| <input checked="" type="checkbox"/> Saturated in Upper 12 inches | <input type="checkbox"/> Water-stained Leaves |
| <input type="checkbox"/> Water Marks | <input type="checkbox"/> FAC-neutral Test |
| <input checked="" type="checkbox"/> Drift Lines | <input type="checkbox"/> Hydrologic Field Data (site specific) |
| <input type="checkbox"/> Sediment Deposits | |
| <input checked="" type="checkbox"/> Wetland Drainage Pattern | |

Remarks: blue creek has experienced modification historic

JURISDICTIONAL DETERMINATION AND RATIONALE

Hydrophytic Vegetation Present? Yes No Is this sample location within a wetland? Yes No
 Hydric Soils Present? Yes No
 Wetland Hydrology Present? Yes No Wetland Classification: Palustrine emergent
 Additional comments: Palustrine scrub shrub
near border of pond

BLUE CREEK RANCH

CATHERINE'S ROAD

ROARING FORK RIVER

4,659 SQ. FT. ±
.107 ACRES ±

3,823 SQ. FT. ±
.088 ACRES ±

83,201 SQ. FT. ±
1.910 ACRES ±

POND

TOTAL WETLANDS AREA
236,268 SQ. FT. ±
5.424 ACRES ±

37,030 SQ. FT. ±
.850 ACRES ±

71,317 SQ. FT. ±
1.637 ACRES ±

36,238 SQ. FT. ±
.850 ACRES ±



1" = 200'

OLD HWY. 82



NATURETECH CONSULTANT SERVICES CORP.

2128 Railroad Ave., Ste. 201, Rifle, CO 81650
(970) 625-8553 • FAX 625-8073 • Email: NTCS1@sopris.net

September 6, 2000

Davis Horn Inc.
Attn: Glenn Horn
215 S. Monarch #104
Aspen, CO 81611

Dear Glenn:

This letter shall serve as a statement of opinion for the Blue Creek Ranch property. These comments are based on my experience and observation on the site, observations and work on other sites in the area. The anticipated direct and indirect impacts of the proposed development to wildlife on this property include habitat loss from construction of roads and buildings and ancillary impacts due to increased human use on the site.

Big game use of the property is likely very limited due to its proximity to existing developments and heavily-used roadways, as well as the current overgrazed condition of the property. The bulk of current wildlife use is from a wide variety of non-game bird species, small mammals and wetland-oriented fauna such as ducks, geese, muskrats and perhaps beavers, though the latter is not likely given the condition of woody vegetation on the property. The tall, mature trees on the property and its proximity to the Roaring Fork River does make this a prime location for roost sites for wintering Bald eagles.

That being said, the habitats located on the parcel are severely degraded due to intense season-long overgrazing by cattle, which has clearly been taking place for a number of years. Noxious weeds are a significant problem throughout the property and woody vegetation is nearly all over-mature, decadent and in varying stages of decay. As a wildlife habitat for any species, this parcel, in its current condition, is of limited value at best.

Given the presence of significant water rights, the presence of wetlands and the expected removal of grazing livestock from the property, there are a number of management options which could create a complex mix of habitat types and in return attract a vibrant and flourishing wildlife community to the property, even in conjunction with the proposed development. However, it will be critical to carefully coordinate construction activities and post-construction human use for the residential development with habitat restoration in order to be successful.

In particular, increased traffic, noise, dogs and other human intrusions must be planned and implemented carefully throughout construction and upon completion of the project in order to maximize wildlife benefits. I would recommend that dogs be regulated with a leash covenant and never be allowed to run freely on the parcel, both during construction and for homeowners thereafter. Physical harassment of wildlife by roving dogs and the resultant negative effects including severe injury, death and abandonment of habitat has been well documented, and noise disturbance even by restrained dogs has been shown to cause total abandonment of habitat by some wildlife species. Cats are another concern, particularly if they are allowed to roam freely in a productive bird-nesting area. Given the potential for a wide variety of neotropical migrant bird species to use this wide riparian area, particularly if the vegetation is properly managed, free-ranging felines could be a problem here, and I would recommend indoor cats only.

Post-construction human use in the area should also be regulated. Construction of nature trails or bike paths should be carefully planned to avoid critical nesting areas, particularly around the wetlands. On roadways accessing the homesites, strict speed limits should be established and enforced, and roads should be designed to discourage excessive speeds. A homeowner brochure should also be created which would introduce new homeowners to the various aspects of living in close proximity to wildlife, what to expect, how to behave, how to deal with problem wildlife and tips on biology and habitat needs and how they can participate in enhancing wildlife viewing opportunities around their homes. Such an introduction to new homeowners would alleviate many potential problems in the future and ensure your initial planning efforts come to fruition over the long-term.

Sincerely,



Steve D. Dahmer
NatureTech Consultant Services Corp.
Director of Ecological Operations

P.O. Box 1908
1005 Cooper Ave.
Glenwood Springs,
CO 81602



(970) 945-5700
(970) 945-1253 Fax

June 13, 2001

Mr. Glenn Horn
Davis Horn Inc.
215 South Monarch
Aspen, CO 81611

RE: Blue Creek Ranch Physical Water Supply

Dear Glenn:

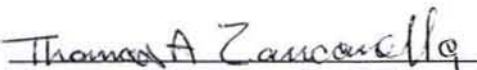
In follow up to our telephone conversation of June 12, 2001, Blue Creek Ranch has been issued a Basalt Contract (No. 383). This contract will allow Blue Creek Ranch to either develop onsite wells (Duck and Snipe) on Blue Creek Ranch property or share the Aspen Equestrian Estates wells (Arabian and Appaloosa) and water system. We believe that either source will be adequate to physically serve the 52 EQR of the Blue Creek Ranch proposed PUD as outlined in Table 2, attached.

All four of the wells (Arabian, Appaloosa, Duck, and Snipe) are located in Area A of the Basalt District and are eligible for the existing substitute supply plan approved by the Colorado Division of Water Resources and Garfield County. Therefore, it is our opinion that an adequate water supply can be developed to serve the proposed Blue Creek Ranch PUD. It will be necessary to confirm the well production and water quality before final plat.

If you have any questions, please call our office at (970) 945-5700.

Very truly yours,

Zancanella & Associates, Inc.


Thomas A. Zancanella, P.E.

Attachment:

cc: Scott Miller

Z:\20000\20729 Blue Creek Ranch\ghorn_watersupply.wpd

BLUE CREEK RANCH
PLANNED UNIT DEVELOPMENT:
SKETCH PLAN

APPENDIX

Table 2
Blue Creek Ranch
Estimated Water Requirements

Water Use Inputs

Domestic Demands			Commercial Demands			Other Demands		
# of Residential EQRs	50.0	EQRs	# of Commercial EQRs	2.0	EQRs	Pond Surface Area	1.90	acres
# persons/EQR	3.5	cap/EQR	# persons/EQR	3.5	cap/EQR	Annual Net Evaporation	2.59	ft
# gallons/person/day	100	gpcd	# gallons/person/day	100	gpcd	Livestock	20.00	units
Percent Consumed	5%		Percent Consumed	5%		Livestock Consumption	15.00	gpud
Lawn Irrigation	2500	sq-ft/EQR	Lawn Irrigation	2500	sq-ft/EQR	Irrigated Open Space	0.00	acres
Application Efficiency	70%		Application Efficiency	70%		Application Efficiency	70%	
Crop Irrig reqmnt (CIR)	1.99	ft	Crop Irrig reqmnt (CIR)	1.99	ft	Crop Irrig reqmnt (CIR)	1.99	ft

Water Use Calculations

Month	Diversion Requirements							Consumptive Use						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Domestic In-house (ac-ft)	Commercial In-house (ac-ft)	Dom\Comm Irrigation (ac-ft)	Pond Evaporation (ac-ft)	Live- stock (ac-ft)	Total (ac-ft)	Average Flow (gpm)	Domestic In-house (ac-ft)	Commercial In-house (ac-ft)	Dom\Comm Irrigation (ac-ft)	Pond Evaporation (ac-ft)	Live- stock (ac-ft)	Total (ac-ft)	Average Flow (gpm)
January	1.665	0.07	0.00	0.00	0.029	1.76	12.8	0.083	0.00	0.00	0.00	0.029	0.12	0.8
February	1.504	0.06	0.00	0.09	0.026	1.68	13.6	0.075	0.00	0.00	0.09	0.026	0.19	1.6
March	1.665	0.07	0.00	0.18	0.029	1.94	14.2	0.083	0.00	0.00	0.18	0.029	0.30	2.2
April	1.611	0.06	0.27	0.45	0.028	2.42	18.2	0.081	0.00	0.19	0.45	0.028	0.75	5.6
May	1.665	0.07	1.61	0.67	0.029	4.04	29.5	0.083	0.00	1.13	0.67	0.029	1.92	14.0
June	1.611	0.06	2.04	0.89	0.028	4.63	34.9	0.081	0.00	1.43	0.89	0.028	2.43	18.3
July	1.665	0.07	1.93	0.91	0.029	4.60	33.6	0.083	0.00	1.35	0.91	0.029	2.37	17.3
August	1.665	0.07	1.25	0.79	0.029	3.81	27.8	0.083	0.00	0.88	0.79	0.029	1.79	13.0
September	1.611	0.06	1.06	0.53	0.028	3.29	24.8	0.081	0.00	0.74	0.53	0.028	1.38	10.4
October	1.665	0.07	0.34	0.31	0.029	2.41	17.6	0.083	0.00	0.24	0.31	0.029	0.66	4.8
November	1.611	0.06	0.00	0.11	0.028	1.81	13.6	0.081	0.00	0.00	0.11	0.028	0.22	1.6
December	1.665	0.07	0.00	0.00	0.029	1.76	12.8	0.083	0.00	0.00	0.00	0.029	0.12	0.8
Annual	19.600	0.78	8.50	4.93	0.34	34.15	21.12	0.98	0.04	5.95	4.93	0.34	12.23	7.55

Units

Zancanella & Associates, Inc.
 Water Resources Engineers
 Glenwood Springs, CO

10 Single Family Affordable Units @ 1.00
 20 Single Family Freemarket Units @ 1.25
 10 Single Family Large Lots @ 1.50
 10,000 Sq Ft Commercial
 Total

Total EQRs

10.00 EQR/Unit
 25.00 EQR/Unit
 15.00 EQR/Unit
 2.00
 52.00

P.O. Box 1908
1005 Cooper Ave.
Glenwood Springs,
CO 81602



(970) 945-5700
(970) 945-1253 Fax

ENGINEERING CONSULTANTS

June 25, 2001

Mr. Rob Cumming
Blue Creek Ranch
3220 County Road 100
Carbondale, CO 81623

RE: Blue Creek Ranch Wastewater Treatment

Dear Rob:

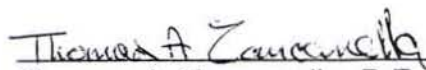
The wastewater treatment for the proposed Blue Creek Ranch development will be as described in the "Engineering Report and Site Application for the Blue Creek Ranch Wastewater Treatment Facility." That report and application was submitted concurrently to the Garfield County Board of County Commissioners, the Garfield County Board of Planning Commissioners, the Colorado Department of Public Health and Environment, and other required review agencies on June 8, 2001.

The system described in the site application consists of single or clustered septic tanks for solids removal. A gravity sewer will then convey the septic tank effluent to a lift station which will pump to the treatment facility. The treatment facility will be composed of two Recirculating Filter Systems (RFS), giving a plant capacity of 0.02 MGD. Blue Creek Ranch will have an estimated flow rate of approximately 12,740 gpd (0.013 MGD). The effluent will be discharged to the Roaring Fork River near the County Road 100 bridge. Additional information and product details are contained in the site application. The treatment system as described in that document is adequate to treat the wastewater generated by the proposed development.

If you have any questions, please call our office at (970) 945-5700.

Very truly yours,

Zancanella & Associates, Inc.


Thomas A. Zancanella, P.E.



cc: Mr. Glenn Horn, Davis Horn Inc.
Scott Miller

BLUE CREEK RANCH LAND USE APPLICATION

List of Owners within 200 feet of Subject

Subject Site: Parcel No. 2391 311 00 011

2391 312 00 023

Aspen Equestrian Estates
719 5th Avenue
Miami Beach FL 33139

2391 312 00 013

Oscar & Wilma Cerise
281 County Road 105
Carbondale CO 81623-9605

2391 312 00 024

St. Finnbar Land Company
Attn: Morton Heller
Pitkin County Bank
534 E. Hyman Avenue
Aspen CO 81611

ASPEN EQUESTRIAN ESTATES

Lot C1 AEQ, LLC, et al.
c/o Klein - Zimet PC
201 N. Mill Suite 203
Aspen CO 81611

2391 313 00 028

Scott K. Mann & Victoria Quintana
2727 County Road 100
Carbondale CO 81623-9534

Dorothy Mae Gerstley
1525 Lexington Drive
Dresher PA 19025-1255

2391 313 00 027

Daniell J. Missey
1522 School Unit #F
Chicago IL 60657

Henry & Lana Trettin
c/o Trettin Rodenbush & Partners
3350 Ocean Park Blvd #100
Santa Monica CA 90405

2391 313 00 026

A. Stephen & Janice R. Crowley
2621 County Road 100
Carbondale CO 81623-9534

2391 313 00 015

Board of County Commissioners
Garfield County
109 8th Street, Suite 300
Glenwood Springs CO 81601-3363

2391 311 00 009

Lael & Eddie Hughes
3844 County Road 100
Carbondale CO 81623-8808

Denver & Rio Grande Western Railroad ROW
Board of County Commissioners
Pitkin County
530 E. Main Street
Aspen CO 81611

2391 132 00 005

Mary Ann Hyde Revocable Trust
Attn: Mary Ann Hyde
POB 1557
Aspen CO 81612-1557

Colorado Department of Highways
202 Centennial Street
Glenwood Springs CO 81602

2391 311 00 012

Edward E. Dreager
44 Hooks Lane #16
Basalt CO 81621

Bureau of Land Management
50629 US Highway 6 and 24
Glenwood Springs, CO 81601

USFS
900 Grand Avenue
Glenwood Springs CO 81601

2463 013 00 043

Carbondale Corporation
2000 S. Colorado Blvd.
Tower Two, Suite 2-1000
Denver CO 80222

PATRICK & STOWELL

Attorneys at Law

June 25, 2001

Kevin L. Patrick

Brian L. Stowell

Scott C. Miller

Ramsey L. Kropf*

Sara M. Dunn

*licensed in AZ, CO, WY

Mr. Mark Bean
Garfield County Planning Department
109 8th Street, Suite 303
Glenwood Springs, CO 81601

RE: Blue Creek Ranch PUD and Sketch Plan Application; (our file 591a)

Dear Mr. Bean,

We represent Blue Creek Land Holdings, LLC ("Blue Creek"), with respect to water and sewer matters associated with the proposed Blue Creek Ranch PUD. This letter is in response to Garfield County Planning's letter dated December 6, 2000 to Mr. Glen Horn, requesting additional information and supporting documentation for the proposed water supply and sewer service for the development. Blue Creek's engineer is addressing the physical aspects of the water supply and sewer service by separate letter and documentation. This letter will address the *legal* aspects of such proposed water and sewer service herein.

A. *Water Supply:*

1. *Domestic, Treated Water Supply:*

Blue Creek will provide a domestic, treated potable water supply to the residential lots and other structures requiring treated water through connection with the water system of its neighboring development, Aspen Equestrian Estates ("AEE"). An agreement ("Water Service Agreement") has been negotiated over the past three months and is very close to finalization and signing. A copy of the draft Water Service Agreement is attached to this letter as Exhibit "A." The Water Service Agreement provides for Blue Creek to construct the physical water delivery system servicing Blue Creek and connect to the existing water system located on the AEE property. There is an existing above ground storage tank and treatment plant located on the platted "Equestrian Parcel" of the AEE development. The AEE Homeowners' Association ("AEEHOA") is the owner of the physical water system and the holder of the easements for the system. The AEE developer, Aspen Equestrian Estates, LLC ("AEELLC"), is the owner of the Equestrian Parcel and is providing the consent and right to utilize the storage tank and treatment plant easement site on its property to service Blue Creek Ranch. Both AEELLC and AEEHOA are parties to the Water Service Agreement.

Main Office:

730 E. Durant Ave.

Suite 200

Aspen, CO 81611

970.920.1028 Tel

970.925.6847 Fax

Arizona Office:

310 S. Mill Ave.

Suite 201

Tempe, AZ 85281

480.921.4044 Tel

www.waterlaw.com

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The Water Service Agreement provides for a master Water Association to be formed by the two developments with equal homeowners' representation on the board of the Association. The Water Association will own, operate and manage the joint water system for the benefit of both properties.

The joint treated Water System will be supplied from underground wells currently drilled and located on the AEE property, and if necessary for capacity, on the Blue Creek property. Currently, there are three wells permitted by the State Engineer to serve AEE - the Appaloosa Well, the Arabian Well and the Pinto Well ("AEE Wells"). Copies of these well permits are attached to this letter as Exhibit "B." The AEE Wells are covered and augmented against curtailment by an Area A "water allotment contract" with the Basalt Water Conservancy District ("BWCD"). A copy of this Contract is attached as Exhibit "C." Blue Creek will amend and/or obtain "second" well permits for the AEE Wells to allow their use within the water system and for service on the Blue Creek property. Blue Creek has already obtained the necessary BWCD Contract to cover and augment the water use demand on Blue Creek Ranch. A copy of this BWCD Contract is attached hereto as Exhibit "D." Well permit applications for the increased use from the AEE Wells will be submitted as soon as the Water Service Agreement is signed. We anticipate no difficulty with well permits issuing based on Blue Creek's BWCD Contract.

The Water Service Agreement provides for the drilling of one to two additional wells on the Blue Creek property, if necessary to meet demand ("Blue Creek Wells"). Blue Creek will be responsible for the construction and connection of the Blue Creek Wells and obtaining the necessary well permits. At this time, no well permit applications have been filed for the Blue Creek Wells since it has been determined by the engineers that the AEE Wells will be sufficient to provide treated water service to both developments. Thus, the Blue Creek Wells will be back-up and may not be drilled.

The Water Service Agreement provides for charging all treated water users within both developments fees to cover the cost of operation, management, repair, replacement, and improvement of the joint Water System, as well as, to provide for a reserve fund. Adequate provisions will be placed in the Protective Covenants for Blue Creek Ranch obligating the homeowners/water users to these charges.

In the event the Water Service Agreement is not consummated, Blue Creek will construct an on-site independent water system similar as constructed on the AEE property. State Engineer well permits for the Blue Creek Wells will be obtained and covered by the Blue Creek BWCD Contract. A water treatment plant and water storage tank would be constructed on-site and conveyed to the Blue Creek Homeowners' Association along with all easement rights, similar as approved at the AEE development.

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2. *Raw Water Irrigation:*

The Blue Creek Ranch property is served by the following ditch irrigation water rights: Basin Ditch; Middle Ditch; and Lower Ditch. The Basin Ditch diverts out of the North bank of the Roaring Fork River, west of El Jebel in Section 33 of Township 7 South, Range 87 West of the 6th P.M.. The Basin Ditch has several appropriations or priorities, as follows: 5.0 c.f.s. decreed to the original construction (Priority 49); 5.0 c.f.s. decreed to the first enlargement (Priority 108); and, 1.8 c.f.s. decreed to the second enlargement (Priority 137), all such priorities adjudicated on May 11, 1889 in Civil Action 132; and 33.2 c.f.s. decreed to the third enlargement (Priority 294) as adjudicated on August 25, 1936 in Civil Action 3082.

Blue Creek acquired and has title ownership to 0.176 c.f.s. in each of the first three priorities of the Basin Ditch (totaling 0.528 c.f.s.) and 5.865 c.f.s. in Priority 294. A copy of the deed conveying the water rights to Blue Creek is attached as Exhibit "E."

State Engineer Diversion records for the Basin Ditch show a consistent pattern of diversions starting in late April/early May until the end of October. The capacity of the Basin Ditch is approximately 45 c.f.s. On average, the Basin Ditch diverts in the range of 35 to 42 c.f.s. from mid-May to mid-July. Then in most years, it drops off to diversions around 15 to 7 c.f.s. through mid-September and into the fall. However, the stretch of the Roaring Fork River where the diversion point is located has not historically been limited by physical flow, so it appears lack of late season diversions are not a result of lack of divertable water supply.

The Basin Ditch Priority Nos. 49, 108, and 137 are not subject to the "Cameo call," a Colorado mainstem call that occurs most every irrigation season, generally from late June through October and occasionally in April. The later Basin Ditch Priority 294 is subject to the "call," yet has historically enjoyed protection from this call, and thus is permitted to divert, by virtue of inclusion in the historic user's pool for which Green Mountain Reservoir releases are made.

The Basin Ditch water right has historically served the approximately twenty acres of pasture land located on the north portion of the Blue Creek property where the proposed P.U.D. tree farm/nursery open space will be located. A portion of this area has also been historically served by the Middle Ditch further discussed below. Blue Creek's 6.4 c.f.s. ownership in the Basin Ditch is adequate legal and physical water to service the raw water irrigation demands of the proposed P.U.D. No change of water right case will be required to be filed in Water Court since the Basin Ditch is decreed for irrigation and the law, as well as the State Engineer's Office, recognizes no change of water right when only the crop or plant species grown is changed.

The Middle Ditch and Lower Ditch also serve Blue Creek Ranch. The Middle Ditch diverts by decree from Blue Creek. The Ditch was originally decreed for 5.0 c.f.s. in Civil Action 132, adjudicated on 5/11/1889 with an appropriation date of 4/17/1884. 1.76 c.f.s. of that amount has

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been decreed to an alternate point of diversion at the Middle Ditch Well in Case No. W-197.

The Lower Ditch was originally decreed for 1.5 c.f.s. on 5/11/1889 with an appropriation date of 4/15/1882 in Civil Action 132 for diversion out of the Roaring Fork River. A further appropriation was decreed to the Lower Ditch in the amount of 11.9 c.f.s. on 11/5/1971 with an appropriation date of 4/15/1882 in Civil Action 5884.

Blue Creek acquired and has title ownership to 0.96 c.f.s. in Priority 83 of the Middle Ditch. See Exhibit "E." Blue Creek acquired and has title ownership to 0.365 c.f.s. of Lower Ditch, Priority No. 23, and 3.996 c.f.s. in Lower Ditch, Priority No. 721. See Exhibit "E."

There has never been a call on these water rights. Blue Creek's ownership amounts in the Middle and Lower Ditch are more than legally and physically sufficient for the continued irrigation of open space in and around the residential development. No change case will be required for the continued use of these water rights for irrigation.

We can provide copies of diversion records and water court decrees for the above ditches, at your request.

B. Wastewater Service:

Blue Creek is pursuing two options for sewer service: (1) construction of an on-site wastewater treatment plant; and (2) connection to the Ranch at Roaring Fork ("Ranch") wastewater treatment plant.

1. On site system:

Blue Creek has prepared and submitted a Site Application for a new Domestic Wastewater Treatment Plant pursuant to Colorado Department of Public Health and Environment Regulations. At this time the Site Application is being reviewed by the various referral agencies. A copy of the Site Application was submitted to your office on June 6, 2001.

It is our opinion a Site Application will reasonably be approved by the Colorado Water Quality Control Division. The following represents the criteria used for decision making on a Site Application by the Division. Under each criteria heading, we provide evidence and information as to how such criteria is or will be met.

1. Designation of the legally responsible person and the legal description of the location.

The site location will be dedicated on the plat of the Blue Creek PUD and will represent an easement for the benefit of the lot owners to be held by the Homeowners' Association. The "legally responsible person" will be the homeowners' association and this will be provided for in the Subdivisions Improvements Agreement and the Protective Covenants for the subdivision. The

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wastewater facility will be operated by a Colorado licensed operator, as identified in the Site Application.

2. The existing domestic wastewater treatment facilities and feasibility (including the cost effectiveness, water quality management and local comprehensive plans, and legal, political limitation) of treating wastes in an areawide facility.

In 1998/1999, Mid Valley Metropolitan District ("MVMD") attempted to amend its Service Plan to establish an "areawide facility" at the location of the Ranch. The service plan amendment was not approved by Garfield County Board of Commissioners. In discussions with MVMD representatives, there has been no expression of interest in attempting such an amendment to its Service Plan in the future. Carbondale Sanitation District has not indicated it is interested in extending wastewater service to the area of Blue Creek Ranch, nor is Blue Creek Ranch in Carbondale's latest Clean Water Act §201 Facilities Plan. The only existing wastewater treatment facility in the vicinity is located at the Ranch at Roaring Fork. The Ranch is not a public wastewater provider. The Ranch's treatment plant Site Application does not include Blue Creek Ranch.

Blue Creek is in the process of discussions with the Ranch concerning connection to the Ranch treatment plant. At this time, the Ranch has not offered wastewater treatment service to Blue Creek. In any event, as further discussed below, Blue Creek will continue to pursue discussions with the Ranch. Under the WQCD's policies on "feasibility" of consolidation, the economic analysis shows that it is not feasible to consolidate with the Ranch. As detailed in the Blue Creek Site Application, the cost of consolidating with the Ranch is at least 240% more than the on-site alternative. Under WQCD policy, if the cost of consolidation exceeds the cost of separate plant construction by more than 30%, no further analysis of consolidation is required.

3. Relationship to and potential effect of proposed facility on any water supply intake.

The nearest domestic water supply intake in the Glenwood Springs Pump Station, approximately 17 miles downstream. The WQCD has issued its "preliminary effluent limits" ("PEL") report for the proposed Blue Creek wastewater treatment plant. See Report from WQCD attached to this letter as Exhibit "F." The WQCD does not indicate concerns with maintaining water quality on the Roaring Fork River due to construction of the Blue Creek plant, and the WQCD indicated the State's antidegradation policy would be met.

4. Location of proposed project to any flood plain or other natural hazard.

The facility is not located within a 100 year flood plain or other natural hazard area. See Site Application.

5. Impact on public health, welfare, and safety.

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As evidenced by the WQCD PEL report, the proposed treatment facility poses no adverse impact on health, safety and welfare.

6. Proper notice.

Under Section 22.4(6) of the Site Application Regulations, notice of the proposed facility is required 15 days prior to submitting the Site Application to the Division. This notice has been and continues to be posted on-site in compliance with this regulation.

7. Review and comment of all required local government agencies and all planning agencies including recommendations for approval or disapproval with any conditions which should be a part of the Division approval.

The Site Application has been sent to all of the referral agencies as required by the Site Application regulations. At your request, we can forward the other government comments and sign-offs as soon as they are received.

8. Long-range comprehensive planning for the area as it affects water quality.

The stated goals of the Garfield County Comprehensive Plan relating to sewer services is to ensure the provision of legal, adequate, dependable, cost effective and environmentally sound sewer services for new development. The proposed treatment plant utilizes state of the art environmentally sensitive technology and discharges a relatively small flow to the Roaring Fork River. As stated in the WQCD PEL Report, "...due to the small design flow of the proposed facility versus the high flow rate of the receiving stream, analyses indicate that assimilative capacities are extremely large." Thus, despite the small increase in density over the comprehensive plan zoning, the evidence shows there will be no adverse affect on water quality with the proposed treatment plant and discharge.

9. The water quality management plan for the area. The Division shall rely substantially upon such plan in deciding whether to grant site approval where the plan is current and comprehensive with respect to its analysis of population growth and distribution as it related to wastewater treatment. In those areas where water quality management planning has not been conducted, or where such planning is not current or comprehensive, the Division shall rely upon the factors (a) through (i) of this section and upon the information submitted in the application for site approval as the primary determinants in making the site application decision. Where portions of a water quality management plan are adopted as regulation, pursuant to § 25-8-105(3)(a), they shall be binding on the site approval.

Under Section 208 of the Clean Water Act, there is an approved Area-wide Water Quality

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Management Plan ("Regional Plan") for Northwest Council of Governments ("NWCOG"). Garfield County is not within NWCOG's planning region jurisdiction (Region XII). However, the relevant stretch of the Roaring Fork River watershed is discussed in the Regional Plan. The Regional Plan does not include any point source recommendations that would prohibit or recommend against the proposed Blue Creek treatment plant. The Regional Plan has recommended that a Consolidated Sanitation Management District for this mid-valley area be established in the future. Blue Creek would not object to operating under or participating in a consolidated management district.

10. The policies set forth in 22.3

It is our opinion the Site Application regulation policies are met as evidenced by the information described above, the information contained in the Blue Creek Site Application and supporting documents, and the WQCD PEL Report.

2. *Connection to the Ranch at Roaring Fork:*

Blue Creek is also pursuing options for wastewater treatment service through the Ranch. Since October of 2000, Blue Creek has been in discussions with the Ranch for sewer service. Blue Creek has formally requested sewer service from the Ranch, but at this time, the Ranch has not offered this service. The Ranch treatment plant was recently expanded to a 0.1 million gallons per day capacity to serve the Ranch, St. Finnbar and AEE. At this point, the Ranch engineers have not determined that there is sufficient capacity in the Plant to serve Blue Creek. Service from the Ranch will also require a 3/4 affirmative vote of all the Ranch homeowners, which has proven in the past to be difficult to obtain.

In preparation for the potential of service through the Ranch, Blue Creek has negotiated a Sewer Connection Agreement with AEE to allow connection to AEE's main sewer trunk line and the conveyance of wastewater through this line to the Ranch property boundary. A copy of the draft Sewer Connection Agreement is attached as Exhibit "G." This Agreement is close to finalization and will allow Blue Creek the option to convey wastewater through AEE if the Ranch offers reasonable sewer service.

In conclusion, the evidence shows that Blue Creek is reasonably likely to gain site approval from the WQCD for an on-site treatment facility. However, Blue Creek is still willing to consider connection to the Ranch if such service is offered. Blue Creek anticipates that it will be in a position to make a final determination as to its wastewater alternative by preliminary plan stage or other appropriate point in the land use review process.

If you have any questions, need further information, or would like to discuss any of the above, please give me a call.

PATRICK & STOWELL, P.C.

Mr. Mark Bean
June 25, 2001
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Very truly yours,

PATRICK & STOWELL, P.C.
A Professional Corporation

By: 

Scott C. Miller
miller@waterlaw.com

SCM/slp

Enclosures

cc w/encl: Blue Creek Land Holdings, LLC
Mr. Rob Cumming
Mr. Ace Lane
Mr. Tom Zancanella, P.E.
Mr. Glenn Horn
Mr. Yancy Nichols, P.E.
Mr. Mark Beckler, P.E.

WATER SUPPLY AND CONNECTION AGREEMENT

THIS WATER SUPPLY AND CONNECTION AGREEMENT ("Agreement") is made and entered into as of the ___ day of _____, 2001, by and between BLUE CREEK LAND HOLDINGS, LLC, a Colorado limited liability company ("Blue Creek"), ASPEN EQUESTRIAN ESTATES, LLC, a Colorado limited liability company ("AEE"), and ASPEN EQUESTRIAN ESTATES HOMEOWNERS ASSOCIATION ("AEEHOA");

RECITALS:

A. Blue Creek is the owner of that certain real property located in Garfield County, Colorado commonly known as Blue Creek Ranch, which property is described on Exhibit "A" attached hereto and incorporated herein by this reference ("Blue Creek Ranch") together with certain water rights used in connection with such property; and

B. AEE is the developer of that certain real property located in Garfield County, Colorado known as the Aspen Equestrian Estates P.U.D., which property is described on Exhibit "B" attached hereto and incorporated herein by this reference ("AEE Property") together with certain water rights used in connection with such property; and

C. Within the AEE Property and shown on the recorded plat thereof is a parcel of land described and known as the "Equestrian Parcel," which is owned by AEE ("Equestrian Parcel"); and

D. Within the AEE Property and shown on the recorded plat thereof are common areas of open space and roads owned by the AEEHOA ("AEEHOA Common Area"); and

E. Located primarily upon the Equestrian Parcel is a water storage tank, a water treatment plant and related facilities owned by AEEHOA (collectively the "Plant") and located upon the AEEHOA Common Area is an existing underground water well owned by AEEHOA connected to the Plant, all of which structures and facilities are utilized by AEEHOA for the provision of treated water for domestic in-house and associated irrigation use to the single-family residences and other structures and uses located upon the AEE Property, for fire flows, and for treated water service to the Equestrian Parcel; and

F. AEE has conveyed an easement to AEEHOA for the Plant site located on the Equestrian Parcel and such easement is shown on the recorded plat of the AEE Property ("Plant Site"); and

G. In the conveyance of the Plant and water supply system improvements and the grant of the easement for the Plant Site to AEEHOA, AEE has reserved unto itself the right to make the Plant available to third parties and to receive compensation and cost recovery therefore in accordance with such documents of transfer; and

H. Blue Creek desires to receive treated water from the Plant for in-house domestic and associated irrigation use by those single-family residences and other structures and uses that may be constructed on Blue Creek Ranch; and

I. AEE and AEEHOA are willing to provide such treated water service to Blue Creek, pursuant to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual agreements made herein, Blue Creek, AEE and AEEHOA agree as follows:

1. Treated Water Service to Blue Creek Ranch. Subject to the terms and conditions of this Agreement, AEE and AEEHOA hereby agree to allow Blue Creek to connect to the Plant and agree to supply treated water to Blue Creek Ranch and any development constructed thereon for domestic in-house and associated irrigation use, and other authorized structures and in-building uses.

2. Water Connection Fees; Attorney Fees. Upon the full execution of this Agreement, Blue Creek shall pay to AEE a one-time payment of one hundred seventy-five thousand dollars (\$175,000.00) in consideration for the right to connect its facilities to the Plant and receive treated water therefrom in accordance with the terms and conditions of this Agreement (the "Water Connection Fee"). As of the date hereof, Blue Creek has paid the amount of five thousand dollars (\$5000.00) to AEE to review and enter into the negotiations for this Agreement, payment of which is acknowledged by AEE. Subsequent to the payment of the Water Connection Fee and provided Blue Creek has met its obligations under Paragraph 12 below with respect to obtaining legal water rights and/or permit approvals, Blue Creek shall be entitled to make physical connection to the Plant and be provided with a treated water supply as set forth herein. In addition to the Water Connection Fee, Blue Creek agrees to pay all of AEE's reasonable attorneys' fees incurred in the negotiation and review of this Agreement, as well as reasonable attorneys' fees incurred in the negotiation and review of any other documents and/or agreements necessary for the implementation of this Agreement (except for documents or agreements that would have been or were required to be prepared despite this Agreement), partial payment of which has been made by Blue Creek to AEE as of the date hereof and is hereby acknowledged by AEE. At AEE's option and discretion, Blue Creek shall pay any applicable attorney fees within fifteen days of the date of invoice thereof or deposit estimated fees to be incurred in advance in an escrow account with an escrow agent mutually agreed upon by Blue Creek and AEE.

3. Refund of Water Connection Fee. Blue Creek is in the process of obtaining certain land use approvals from Garfield County for the subdivision of Blue Creek Ranch. In the event that Blue Creek does not obtain the approvals it requires or otherwise desires to terminate this agreement before making any physical connection to the Plant in furtherance of the rights granted by this Agreement, Blue Creek shall be entitled to terminate this Agreement upon written notice to AEE ("Notice of Termination"). Within thirty days after such Notice of Termination is given, AEE shall refund to Blue Creek the Water Connection Fee, less a certain sum of money as determined in accordance with the schedule of reimbursement described as follows. If Blue Creek provides Notice of Termination on or before 5:00 p.m., on December 31, 2001 ("First Refund Deadline"), then AEE shall refund to Blue Creek the Water Connection Fee,

less ten thousand dollars (\$10,000.00). If Blue Creek provides Notice of Termination after the First Refund Deadline but on or before 5:00 p.m., on December 31, 2002 ("Second Refund Deadline"), then AEE shall refund to Blue Creek the Water Connection Fee, less ten thousand dollars (\$10,000.00) and less an additional ten thousand dollars (\$10,000.00) for every quarter of the year that has elapsed (in the year in which the Notice of Termination is given) prior to the Notice of Termination. If Blue Creek provides Notice of Termination after the Second Refund Deadline but on or before 5:00 p.m., on December 31, 2003 ("Third Refund Deadline"), then AEE shall refund to Blue Creek the Water Connection Fee, less fifty thousand dollars (\$50,000.00) and less an additional twenty thousand dollars (\$20,000.00) for every quarter of the year that has elapsed (in the year in which the Notice of Termination is given) prior to the Notice of Termination. For purposes of this Agreement and refund provision, "quarter" means a three month period of time beginning immediately after the preceding three month period and ending at midnight on the last day of the third month in such period. Once a "quarter" begins, the sum of money corresponding with that quarter is not refundable or pro-ratable under this Agreement. The first quarter of a particular year begins immediately after the expiration of the previous Refund Deadline. By way of example, if Blue Creek were to provide Notice of Termination at any time within the first quarter after the First Refund Deadline, AEE would refund the Water Connection Fee, less \$20,000.00 (\$10,000 for the first year and \$10,000 for one quarter of the second year).

4. Master Water Association. It is contemplated that Blue Creek, AEE and AEEHOA shall form a master water association that shall govern, control, maintain and operate the water system for both Blue Creek Ranch and the AEE Property (the "Water Association"). The Water Association shall be responsible for adopting rules and regulations governing water usage within both developments, billing all water users within both developments an equal charge for water usage and reserve for replacement costs, and operating, maintaining, improving, repairing, replacing and taking such other necessary and prudent actions with respect to the Plant and all treated water supply, storage, transmission and distribution facilities and improvements within both developments ("Water System Infrastructure"). It is agreed and acknowledged that the Board of Directors for such Water Association shall consist of two members and an alternate member appointed from Blue Creek or from the homeowners association for Blue Creek Ranch upon the formation of such homeowners association; and two members and an alternate member appointed from the AEEHOA. The Board of Directors shall have such powers including, but not limited to, deciding and acting upon all Water System Infrastructure matters. Such "infrastructure matters" include, but are not limited to, proposals for water system infrastructure or facilities repair, replacement, maintenance, construction, extension, cleaning, operation, monitoring and management. All Board of Director decisions, including, but not limited to, all "infrastructure matters," management, control and operation decisions, shall be made by not less than a 75% vote of the Board of Directors. If a 75% vote cannot be reached on a matter or question submitted for a vote, then the matter shall be submitted to a qualified, third-party engineer or hydrologist for an independent determination. The engineer or hydrologist recommendation shall be binding and shall have the same effect as if action on the proposed matter received a 75% affirmative vote of the Board of Directors. All homeowners within Blue Creek Ranch and the AEE Property shall be subject to and shall comply with any and all rules and regulations adopted by the Water Association. The parties agree to provide for compliance with such rules and regulations in the master declarations of covenants, conditions, and

restrictions for their respective properties. The Water Association shall be formed jointly by the parties and articles of incorporation for the Water Association shall be filed with the Secretary of State within thirty (30) days from the full execution of this Agreement.

5. Installation of Blue Creek Facilities. Upon payment of the Water Connection Fee to AEE, Blue Creek shall be responsible, at its sole cost and expense, to design, construct and install any and all water lines, pipes, pumps, valves, meters, and other related facilities and improvements required to deliver treated water from the Plant to Blue Creek Ranch (the "Blue Creek Facilities"). All water lines, pipes and related facilities to be constructed shall be equivalent to and compatible with existing AEEHOA water lines and facilities. Blue Creek shall be responsible for connecting the Blue Creek Facilities to the Plant at that eight-inch (8") valve located at the entrance to the AEE Property, as shown more fully on the Plans and Specifications (the "Point of Delivery"). The Water Association shall have the right to inspect the connection of the Blue Creek Facilities to the Plant to insure that such connection has been constructed in accordance with acceptable engineering standards.

6. Easement for Blue Creek. Effective upon the full execution of this Agreement, AEE and AEEHOA hereby grant to Blue Creek a temporary construction easement on, over and across that portion of the AEE Property between Blue Creek Ranch and the Plant in order to allow Blue Creek to construct and install the Blue Creek Facilities thereon at the location graphically shown on Exhibit "C" attached hereto and incorporated herein by reference. Immediately upon final construction and installation of the Blue Creek Facilities, AEEHOA shall grant to Blue Creek a perpetual non-exclusive easement ten (10) feet on either side of the center line of the Blue Creek Facilities and the existing water line from the Plant to the Point of Delivery; and AEE shall grant to Blue Creek a perpetual non-exclusive easement to the Plant Site and the Plant, which are located on the AEE Property. The easements are for purposes of accessing, operating, maintaining, repairing, improving, replacing and distributing treated water through said facilities (the "Easements"). A copy of the Easements are attached hereto as Exhibit "D" and incorporated herein by this reference. Upon final construction and installation of the Blue Creek Facilities the parties agree to execute the Easements. The attorneys for Blue Creek Ranch or an escrow agent designated by both parties shall hold the Easements until the legal description for the Blue Creek Facilities on the AEE Property is prepared by Blue Creek. Once the Blue Creek Facilities have been installed, Blue Creek shall have a legal description prepared for the Blue Creek Facilities installed on the AEE Property. The legal description shall be approved by the parties, which approval shall not be unreasonably withheld, provided the location of the Easements are substantially similar to that shown on Exhibit "C." It shall then be attached to the Easements and the Easements shall be recorded in the Garfield County real estate records. These Easements shall thereafter be conveyed to the Water Association in accordance with Paragraph 7 herein. To the extent any of the Blue Creek Facilities are ever required to be relocated upon the AEE Property in order to continue the water service set forth herein, AEE, AEEHOA and Blue Creek shall cooperate in good faith in the determination of the relocation of the Facilities to a location which does not adversely affect the present or then reasonably foreseeable development or redevelopment of the AEE Property, and in the preparation of an amendment of the legal description of the Easements to reflect the relocated facilities. Any such amended legal description to the Easements shall be recorded in the Garfield County real estate records.

7. Conveyance of AEE Plant, Water Infrastructure, Water Rights & Easements to Association; Insurance. Upon final connection of the Blue Creek Facilities to the Plant, AEEHOA shall transfer and convey the Plant, and both AEEHOA and Blue Creek shall transfer and convey all improvements, components and facilities they respectively own related to the Water System Infrastructure, to the Water Association, free and clear of any and all encumbrances. Upon final connection of the Blue Creek Facilities, AEE, AEEHOA and Blue Creek shall also convey to the Water Association any and all easements and rights-of-way necessary for the Water Association to enter onto the AEE Property and/or Blue Creek Ranch for purposes of operating, maintaining, improving and repairing the Water System Infrastructure. AEE, AEEHOA and Blue Creek shall also convey, transfer and/or assign to the Water Association any and all well permits, water court approvals, water rights, replacement water sources and Basalt Water Conservancy District contracts utilized or associated with the provision of treated water to the AEE Property and Blue Creek Ranch, with the exception of any rights, contracts, permits or approvals related to the Pinto Well for use on the Equestrian Parcel, which well and associated rights shall be owned and held separately by AEE. The Water Association shall thereafter be responsible for operating, maintaining, repairing and replacing the Plant and all other related facilities and Water System Infrastructure, and any and all obligations of AEE, AEEHOA and Blue Creek in connection with the Water System Infrastructure, unless otherwise set forth herein, shall become those of the Water Association. The Water Association shall be obligated to obtain and maintain property and liability insurance related to the Water System Infrastructure in the minimum amount of \$1,000,000 and \$2,000,000, respectively, and shall cause AEE, AEEHOA, Blue Creek and Blue Creek Homeowners Association (when formed) to be named as co-insured on the liability insurance.

8. Water Service to Blue Creek Ranch and AEE Property. Upon the completion of the final connection of the Blue Creek Facilities to the Plant, the Water Association shall provide treated water service to Blue Creek Ranch and to the AEE Property, expressly including the Equestrian Parcel, consistent with the provisions set forth in this Agreement. The average annual treated water demand for the AEE Property has been calculated to be 36.4 acre-feet as shown on the attached water requirements table, attached hereto and incorporated herein as Exhibit "E" ("AEE Water Demand"). The average annual treated water demand for Blue Creek Ranch has been calculated to be 34.2 acre-feet as shown on the attached water requirements table, attached hereto and incorporated herein as Exhibit "F" ("Blue Creek Water Demand"). Either development may exceed its respective Water Demand so long as there is capacity available in the water system. The AEE Property shall have the first right and priority of service up to 36.4 acre-feet of annual water demand produced from the AEE Water Rights. Blue Creek Ranch shall have the first right and priority of service up to 34.2 acre-feet of annual water demand produced from the Blue Creek Water Rights. To the extent both AEE Water Rights and Blue Creek Water Rights are utilized, it is assumed and agreed that AEE Water Rights are utilized first for the service of AEE Water Demand and then Blue Creek Water Demand; and the Blue Creek Water Rights are utilized for the service of any additional demand. Any substantial increase to the AEE Water Demand or Blue Creek Water Demand will require amendment of this Agreement. Water service by the Water Association hereunder shall be appurtenant to the AEE Property and Blue Creek Ranch and shall not be transferable by AEE, AEEHOA, Blue Creek or a Blue Creek homeowners' association to any other development or property. The obligations contained in

this Paragraph shall be delegated to and assumed by the Water Association, so long as the Water Association remains in existence.

9. Water Service Fees. Following connection of the Blue Creek Facilities to the Plant and conveyance of the Blue Creek Facilities to the Water Association, the Water Association shall charge water service fees to all AEE Property and Blue Creek Ranch lot or parcel owners. All lot or parcel owners within the AEE Property and Blue Creek Ranch shall be charged the same basic water service rate as set by the Water Association, which charges for water service shall be submitted directly by the Water Association to each lot or parcel owner within both developments. The Basic Rate shall be established in an amount per EQR used that covers all costs associated with the Plant and Water System Infrastructure, including, without limitation, operations, permitting, maintenance, repair and replacement of the Plant and Water System Infrastructure, including a reasonable reserve. For purposes of establishing the basic water service fee, each single family residential lot on AEE Property and Blue Creek Ranch shall be assumed to require one EQR, defined as 350 gallons per day (based on 3.5 people each using 100 gallons per day) and water demand for up to 2,500 square feet of lawn and garden irrigation. The basic water service fee for non-residential uses shall be established by comparing the estimated (or actual, if the information is available) water requirement for such use to the water requirement for one EQR and adjusting the service fee accordingly. The Water Association shall have the power to charge a surcharge water service fee for water usage by a lot or parcel owner over the set water amount associated with the basic water service fee for such user. The Water Association shall also have the power to shut-off or curtail such over-usage by a lot or parcel owner. The Water Association may charge a stand-by fee to residential lot owners where a water line is installed and ready for connection to the residential lot but is not so connected.

10. Use of Water. Upon delivery of water to residences or other uses within the AEE Property and Blue Creek Ranch, use of water by the individual homeowners and/or other users shall be monitored by individual water meters installed on each residence and/or water-using structure. Such individual meters shall be required by the parties hereto. Each water user within both developments shall thereafter be obligated to pay for the amount of water delivered to the respective lots or structures as recorded by its individual meter pursuant to the rates and regulations adopted by the Water Association in accordance with the above Water Service Fees. Each lot owner and water user within Blue Creek Ranch and the AEE Property shall enter into a water service contract with the Water Association which shall set forth specific terms and provisions related to water delivery, water usage, payment obligations, and other related matters. Blue Creek intends to provide raw water to Blue Creek Ranch through its irrigation water rights and associated ditch system for the additional irrigation of lands within Blue Creek Ranch. Blue Creek will assure that there will be no cross-connections between the Blue Creek Facilities and other treated water facilities owned by individual residences and the raw water irrigation system.

11. Water Supply to Plant; Legal Water Approvals and Rights. It is understood that the source of water supplied to the Plant to serve Blue Creek Ranch and the AEE Property shall be from two wells located upon the AEE Property known as the Appaloosa Well and the Arabian Well, permitted under SEO Well Permit Nos. 053322-F and 053323-F, respectively (the "AEE Water Rights"). The AEE Water Rights are covered by Basalt Water Conservancy District Contract #343 (the "Contract"). At the time of the execution of this Agreement, the Appaloosa Well is constructed and operational, while the Arabian Well was not contemplated to be

constructed and made operational until such time as the AEE Property reached fifty percent (50%) of build out. If and when it becomes necessary to drill and connect the Arabian Well, in the discretionary opinion of the Water Association, the cost of constructing the Arabian Well and connecting it to the Plant shall be borne solely by Blue Creek or the Blue Creek homeowners' association. The parties hereto recognize and agree that it will be necessary to re-permit and/or obtain "second" well permits for the AEE Water Rights, as well as, an amendment to the Contract or an additional Basalt Water Conservancy District water allotment contract, in order to obtain legal authorization to service Blue Creek Ranch ("Re-permitting Requirements"). The fees and costs for such Re-permitting Requirements shall be borne solely by Blue Creek. AEE shall assign the Appaloosa and Arabian Well Permits and the Contract, as amended, to the Water Association subsequent to the formation of the Water Association, and subsequent to completion of the Re-permitting Requirements, after which the Water Association shall at all times keep the Contract and well permits current and in full force and effect. The Water Association shall be responsible for securing other Basalt Water Conservation District water supply contracts or other sources of augmentation for the AEE Water Rights, including obtaining Water Court decreed water rights and obtaining a Water Court plan for augmentation for the AEE Water Rights, if such actions are necessary or required in the future. To the extent fees are incurred or paid in connection with such other contracts, permits or Water Court approvals, the Water Association shall pass the costs of the same to the consumers in both developments as a part of the water service rates. The parties hereto agree that the Water Association shall have a first right of use of the AEE Water Rights and the water produced thereby upon formation of the Water Association and continuing for the duration of this Agreement.

12. Additional Water Supply. In the event of an emergency, water shortage, or any other situation which results in the AEE Water Rights not producing sufficient physical water to provide the water service to both Blue Creek Ranch and the AEE Property as provided herein, the parties agree and acknowledge that the parties shall be obligated to construct one or two wells, as needed, on Blue Creek Ranch in order to provide a back-up supply of water to Blue Creek Ranch and the AEE Property ("Blue Creek Water Rights"). Such determination of insufficient physical supply shall be made by the Water Association. To the extent such well(s) are required to be constructed, the cost of construction and connection thereof, in addition to the cost of any required legal and engineering work, and permitting, contracting or Water Court approvals in connection with the well(s), shall be split equally between the two parties. Blue Creek shall cooperate with the Water Association to provide reasonable access to the Water Association for connection to the Blue Creek Water Rights and for the connection of such rights to the Plant. To the extent the Blue Creek Water Rights are not sufficient enough to provide an adequate supply of water to the Blue Creek Ranch and/or the AEE Property upon a failure of the AEE Water Rights to do so, AEE and Blue Creek shall be obligated to secure any and all other water rights or sources in order to ensure adequate water supply to Blue Creek Ranch and the AEE Property, and the costs thereof shall be split equally between the parties.

13. Operation, Maintenance and Repair. Upon installation of the Blue Creek Facilities by Blue Creek, the Water Association shall thereafter be solely responsible for operating, maintaining, repairing, improving, and replacing the Plant and the Water System Infrastructure and any facilities required to be constructed in the future as contemplated herein, and for collecting for all costs associated therewith. AEE and Blue Creek shall provide in the protective covenants of its respective homeowners' associations that such associations shall include as a

cost of which they can place a lien on the lots of their respective members, the charges payable under this Agreement by an owner who is delinquent in the payments to the Water Association and shall upon request of the Water Association, foreclose such lien and collect such delinquent payments, together with interest thereon at the rate of eighteen percent (18 % per annum) and collect costs and attorney fees. Unless set forth otherwise in this Agreement, the costs associated with the obligations set forth above shall be assessed equally to the parties hereto and/or the homeowners within such developments by the Water Association. In the event it is ever determined by a qualified engineer that a third pump should be added to the Plant in order to continue to provide the water service to the AEE Property and Blue Creek Ranch as provided herein, or to expand such service as may be agreed upon by the parties, Blue Creek agrees that it or its successors and assigns shall be responsible for paying for such pump and its installation at the Plant. The Water Association shall keep the Plant and the Water System Infrastructure and all future facilities in good working order at all times and ensure that the Plant is at all times capable of providing the AEE Property and Blue Creek Ranch treated water supply.

14. Additional Water Users. The parties agree that nothing herein shall prevent AEE from making the Plant available for providing treated water to other properties and for receiving compensation therefore provided however, AEE agrees that it shall provide competent engineering that shows that any such additional service through the Plant demonstrates that such additional usage shall not have an adverse impact upon the ability of the Plant to provide sufficient treated water to Blue Creek Ranch or the AEE Property as provided herein. If such additional water service is to be considered, the parties agree that as a condition to AEE offering such service, the third party must contribute and provide sufficient physical and legal water supplies to support such additional water service, similar in scope and extent as required of the parties herein. If it is determined that such additional water service will be provided, Blue Creek shall not be responsible for any payment for any improvements or upgrades to the Plant to increase its capacity to avoid any such adverse impact. Notwithstanding any provisions in Paragraph 11 to the contrary, such improvements shall include the purchase and installation of a third pump or written determination from a competent engineer that such pump is not necessary to maintain the level of service provided to Blue Creek Ranch and the AEE Property prior to the additional service. Blue Creek and/or a Blue Creek homeowners' association and AEEHOA shall have no obligation in the future to pay through increased service fees for any expansion, upgrade or other improvements to the Plant due to the expanded use thereof, or to provide or make available the Blue Creek Wells for any additional user of the Plant. Notwithstanding the above, the parties agree that should a third party hereafter connect to the Plant and receive water service, Blue Creek shall be entitled to recover from such third party its actual costs and fees associated with constructing and installing the Arabian Well and/or a third pump; and both Blue Creek and AEEHOA shall be entitled to recover its respective share of the actual costs and fees associated with constructing and installing one or more of the Blue Creek Wells. All recoverable costs and fees may be escalated at the rate of 3% per year from the date of completion of these structures.

15. Representations and Warranties of AEE and AEEHOA. AEE and AEEHOA hereby represent and warrant to Blue Creek, as of the date hereof and again as of the date that Blue Creek connects to the Point of Delivery, that to the best of their knowledge:

a. AEE and AEEHOA have full right, power and authority to grant the water service contemplated herein to Blue Creek and to enter into this Agreement and the various other agreements and documents contemplated herein, and that the provision of the water service and the entering into of this Agreement and such other agreements and documents shall not violate any other agreement, arrangement, restriction or other matter to which AEE and/or AEEHOA are a party; and

b. AEEHOA owns the Plant, water rights, water permits, easements and other water system improvements located on the AEE Property free and clear from any and all encumbrances and liens of any kind, or in the alternative, has or will within sixty (60) days following execution of this Agreement, obtained a release or sufficient subordination(s) in recordable form from any senior lienholder(s) releasing or subordinating such liens or interests to AEEHOA ownership and to this Agreement. The parties hereto shall not encumber the Plant, the easements, the water rights or other water system improvements with any debt or obligation of any kind following the execution of this Agreement by the parties except if such debt or obligation is subject to the terms of this agreement or if the encumbering party obtains the consent of the other non-encumbering parties to this Agreement. No Interference. AEE, AEEHOA and Blue Creek agree that neither of them shall undertake any action or, to the extent they are affirmatively obligated to prevent an action to occur to allow any condition to exist that interferes with the uninterrupted delivery of water to either of their properties.

16. Breach of Contract; Default. In the event of a breach of any of the terms and conditions of this Agreement, the non-breaching party shall give the party or parties in default written notice of said breach and a thirty (30) day right to cure; provided, however, that if it is determined in any of the parties sole discretion that the cure of any breach by the other party is immediately necessary in order to protect the health, safety, and welfare of any of the water users, the 30-day cure period set forth above shall not apply. In the event the breaching party has not cured said default within the 30-day period, or begun the diligent undertaking of good faith efforts to cure the default, within the 30 day period, the non-breaching party may bring an action in the Garfield County District Court for damages, mandatory injunctive relief, and/or specific performance and, if determined to be the prevailing party, shall be entitled to recover from the other party reasonable attorneys' fees and costs expended in connection with such action.

17. Assignment. Blue Creek shall have the right, without the consent of AEE and AEEHOA, to assign all or a portion of its right, title and interest in this Agreement to any other party that is a successor in ownership to all or any portion of Blue Creek Ranch, and to any homeowners' association formed to govern all or any portion of Blue Creek Ranch, so long as any such assignee shall assume in writing Blue Creek's obligations hereunder and, to the extent that all of such obligations are assigned, Blue Creek is released from any responsibility for such obligations subsequent to the assignment thereof. AEE shall have the right, without the consent of Blue Creek, to assign all or a portion of its right, title and interest in this Agreement to any other party that is a successor in ownership to all or any portion of the AEE Property, and to any homeowners' association formed to govern all or any portion of the AEE Property, so long as any such assignee shall assume in writing AEE's obligations hereunder and, to the extent that all of such obligations are assigned, AEE is released from any responsibility for such obligations subsequent to the assignment thereof. AEEHOA shall have the right, without the consent of Blue Creek or AEE, to assign all or a portion of its right, title and interest in this Agreement to any

other party that is a successor organization or homeowners' association, so long as any such assignee shall assume in writing AEE's obligations hereunder and, and has the power and authority to meet those obligations, and to the extent that all of such obligations are assigned, AEEHOA is released from any responsibility for such obligations subsequent to the assignment thereof.

18. Termination of Water Association. The parties recognize that the provision of water service to Blue Creek Ranch and the AEE Property is a vital necessity. Therefore, it is understood that in the event the Water Association is terminated, dissolved or caused to cease existence for any reason, the Water Association shall convey undivided interests to Blue Creek (or the Blue Creek homeowners' association, if formed) and AEEHOA, their successors and assigns, without any consideration, the various components of the Water System Infrastructure, the Plant, and the water rights/interests, respectively, together with any and all easements and other assets and rights of the Water Association in order that the parties can continue to provide water service to the homeowners within each development. Thereafter, the AEE homeowners association and the Blue Creek homeowners association shall be equally responsible for operating, maintaining, repairing, improving and replacing the Water System Infrastructure. In such event, the respective homeowners' associations shall abide by the obligations and agreements contained in this Agreement until such time as this Agreement is terminated or amended to provide otherwise.

19. No Conveyance or Encumbrance. Neither AEE nor Blue Creek shall sell, convey, transfer, hypothecate, lease, loan, or encumber the AEE Water Rights or the Blue Creek Water Rights, respectively, without the express written consent of the other party.

20. Indemnification. The parties agree to indemnify, defend, and hold the other harmless from any and all claims, liabilities, injuries, deaths, suits, causes of action or losses of any nature whatsoever incurred by either party resulting from any activity undertaken by such party on the property of the other pursuant to this Agreement. The parties hereto intend not to duplicate any legal services or other costs associated with the defense of any claims against either party described in this section. Therefore, the parties hereto agree to cooperate in full to prevent duplicative expenses incurred as a result of the indemnification herein described.

21. Notice. All notices required under this Agreement shall be in writing and shall be hand-delivered or sent by facsimile transmission or registered or certified mail, return receipt requested, postage prepaid, to the addresses of the parties herein set forth. All notices by hand delivery shall be effective upon receipt. All facsimile transmissions shall be effective upon transmission receipt. All notices by mail shall be considered effective seventy-two (72) hours after deposit in the United States mail with the proper address as set forth below. Either party by notice so given may change the address to which future notices shall be sent.

Notice to Blue Creek:

Blue Creek Land Holdings, LLC
c/o Rob Cumming
3220 County Road 100
Carbondale, CO 81623

With Copy To:

Holland & Hart, LLP

c/o Shane J. Harvey, Esq.
600 E. Main Street
Aspen, CO 81611
Phone: (970) 925-3476
Fax: (970) 925-9367

Notice to AEE:

Aspen Equestrian Estates, LLC
c/o Jay Weinberg
PO Box 4788
Aspen, CO 81612

With Copy To:

Klein-Zimet P.C.
c/o Herb Klein, Esq.
201 N. Mill
Aspen, CO 81611
Phone: (970) 925-8700
Fax: (970) 925-3977

22. Miscellaneous Provisions.

a. This Agreement shall be construed under, and in accordance with, the laws of the State of Colorado.

b. This Agreement shall be binding upon and inure to the benefit of Blue Creek, AEEHOA and AEE and their respective legal representatives, successors and assigns.

c. In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

d. This Agreement constitutes the sole and only agreement of Blue Creek, AEEHOA and AEE with respect to the Plant, Water System Infrastructure and water service herein and supersedes any prior understandings or written or oral agreements between Blue Creek, AEEHOA and AEE with respect to the matters contained herein. This Agreement may not be amended or modified except by written agreement signed by Blue Creek or its successors and assigns, including a Blue Creek homeowners' association, and AEE or its successors and assigns, and AEEHOA or its successors and assigns.

e. Blue Creek, AEEHOA and AEE pledge to utilize their best good faith efforts to act in a timely and reasonable manner to fulfill their obligations hereunder.

f. Words of any gender used in this Agreement shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, and vice versa, unless the context requires otherwise.

g. The section headings utilized herein are for reference purposes only and are not intended in any way to describe, interpret, define or limit the scope, extent or intent of this Agreement or any part hereof.

h. The failure by either Blue Creek, AEEHOA or AEE to enforce against the other party any term or provision of this Agreement shall be deemed not to be a waiver of the right of either Blue Creek, AEEHOA or AEE to enforce against the other party the same or any other such term or provision.

i. This Agreement may be executed in multiple originals or counterparts, each of which shall be an original and, when Blue Creek, AEEHOA and AEE have each signed and provided to the other party at least one (1) copy, such copies together shall constitute a fully executed and binding agreement. Signatures transmitted by facsimile shall be binding as original signatures.

j. If either Blue Creek (or a Blue Creek homeowners' association), AEEHOA or AEE files any action or brings any proceeding against the other arising out of this Agreement, then as between Blue Creek (or a Blue Creek homeowners' association), AEEHOA and AEE, the substantially prevailing party shall be entitled to recover, as an element of its costs of suit and not as damages, reasonable attorneys' fees to be fixed by the court. A party not entitled to recover its costs shall not recover attorneys' fees. No sum for attorneys' fees shall be counted in calculating the amount of a judgment for purposes of determining whether a party is entitled to attorneys' fees.

k. Nothing herein contained shall be deemed or construed by the parties hereto or by any third person to create the relationship of principal or agent or of partnership or joint venture or of any association between AEE, AEEHOA and Blue Creek, except as parties to this Agreement.

IN WITNESS WHEREOF, Blue Creek, AEEHOA and AEE have executed this Agreement as of the date first above written.

BLUE CREEK:

BLUE CREEK LAND HOLDINGS, LLC, a Colorado limited liability company

By: LANE INDUSTRIES, INC., a Delaware corporation, its sole manager

By: _____
Name: _____
Title: _____

AEE:

ASPEN EQUESTRIAN ESTATES, a Colorado limited liability company

By: _____
Name: _____
Title: _____

AEEHOA:

ASPEN EQUESTRIAN ESTATES HOMEOWNERS' ASSOCIATION

By: _____
Name: _____
Title: _____
Attest: _____

Arabian Well

WELL PERMIT NUMBER 053323 F
DIV. 5 WD 38 DES. BASIN MD

APPLICANT

Lot: Block: Filing: Subdiv: ASPEN EQUESTRIAN ESTATES

ASPEN EQUESTRIAN ESTATES
3275 CO RD 100
CARBONDALE, CO 81623-

APPROVED WELL LOCATION
GARFIELD COUNTY
SE 1/4 NW 1/4 Section 31
Township 7 S Range 87 W Sixth P.M.

DISTANCES FROM SECTION LINES
1748 Ft. from North Section Line
1757 Ft. from West Section Line

(970) 963-9397

PERMIT TO CONSTRUCT A WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT
CONDITIONS OF APPROVAL

- 1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of this permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
- 2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- 3) Approved pursuant to CRS 37-90-137(2) for the construction of a well, appropriating ground water tributary to the Roaring Fork River, as an alternate point of diversion to the Basalt Conduit, on the condition that the well shall be operated only when the Basalt Water Conservancy District's substitute water supply plan, approved by the State Engineer, is in effect and when a water allotment contract between the well owner and the Basalt Water Conservancy District for the release of replacement water from Ruedi Reservoir is in effect, or under an approved plan for augmentation. BWCD contract #343.
- 4) The use of ground water from this well is limited to ordinary household purposes inside 47 single family dwellings and three employee dwellings, the irrigation of not more than 3.4 acres of gardens and lawns, the watering of livestock, and commercial uses associated with an equestrian facility. All use of this well will be curtailed unless the water allotment contract or a plan for augmentation is in effect.
- 5) The simultaneous maximum pumping rate of this well and any other well operating under BWCD contract #343 shall not exceed 100 GPM.
- 6) The combined annual amount of ground water to be appropriated by this well and any other well operating under BWCD contract #343 shall not exceed 36.4 acre-feet. This well is known as the Arabian Well.
- 7) The owner shall mark the well in a conspicuous place with well permit number(s), name of the aquifer, and court case number(s) as appropriate. The owner shall take necessary means and precautions to preserve these markings.
- 8) This well shall be constructed not more than 200 feet from the location specified on this permit and not less than 600 feet from any existing well, not owned by the applicant.
- 9) A totalizing flow meter must be installed on this well and maintained in good working order. Permanent records of all diversions must be maintained by the well owner (recorded at least annually) and submitted to the Division Engineer upon request.

JD 3-1-2000

APPROVED
JD2

Hee D. Simon
State Engineer

Jess Deather
By

Receipt No. 0453792B

DATE ISSUED **MAR 11 2000**

EXPIRATION DATE **MAR 01 2001**

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Appaloosa Well

WELL PERMIT NUMBER 053322 - F
DIV. 5 WD 38 DES. BASIN MD

APPLICANT

Lot: Block: Filing: Subdiv: ASPEN EQUESTRIAN ESTATES

ASPEN EQUESTRIAN ESTATES
3275 CO RD 100
CARBONDALE, CO 81623-

(970) 963-9397

APPROVED WELL LOCATION

GARFIELD COUNTY
SE 1/4 NW 1/4 Section 31
Township 7 S Range 87 W Sixth P.M.

DISTANCES FROM SECTION LINES

1826 Ft. from North Section Line
1934 Ft. from West Section Line

PERMIT TO USE AN EXISTING WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT
CONDITIONS OF APPROVAL

- 1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of this permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
- 2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- 3) Approved pursuant to CRS 37-90-137(2) for the use of an existing well, appropriating ground water tributary to the Roaring Fork River, as an alternate point of diversion to the Basalt Conduit, on the condition that the well shall be operated only when the Basalt Water Conservancy District's substitute water supply plan, approved by the State Engineer, is in effect and when a water allotment contract between the well owner and the Basalt Water Conservancy District for the release of replacement water from Ruedi Reservoir is in effect, or under an approved plan for augmentation. BWCD contract #343.
- 4) The use of ground water from this well is limited to ordinary household purposes inside 47 single family dwellings and three employee dwellings, the irrigation of not more than 3.4 acres of gardens and lawns, the watering of livestock, and commercial uses associated with an equestrian facility. All use of this well will be curtailed unless the water allotment contract or a plan for augmentation is in effect.
- 5) The simultaneous maximum pumping rate of this well and any other well operating under BWCD contract #343 shall not exceed 100 GPM.
- 6) The combined annual amount of ground water to be appropriated by this well and any other well operating under BWCD contract #343 shall not exceed 36.4 acre-feet. This well is known as the Appaloosa Well.
- 7) The owner shall mark the well in a conspicuous place with well permit number(s), name of the aquifer, and court case number(s) as appropriate. The owner shall take necessary means and precautions to preserve these markings.
- 8) This well shall be located not more than 200 feet from the location specified on this permit and not less than 600 feet from any existing well, not owned by the applicant.
- 9) A totalizing flow meter must be installed on this well and maintained in good working order. Permanent records of all diversions must be maintained by the well owner (recorded at least annually) and submitted to the Division Engineer upon request.
- 10) Approved for the installation of a pump in, and the use of, an existing well, constructed on September 9, 1999, under monitoring hole notice MH-36529-A. *JD 3-1-2000*

APPROVED
JD2

Hal D. Simpson

State Engineer

Jay Deather

By

Receipt No. 0453202

DATE ISSUED **MAR 01 2000**

EXPIRATION DATE **MAR 01 2001**

Pinto Well (Equestrian Center Well)

APPLICANT

WELL PERMIT NUMBER 53232 - F -
DIV. 5 WD 38 DES. BASIN MD

Lot: Block: Filing: Subdiv: ASPEN EQUESTRIAN ESTATES

ASPEN EQUESTRIAN ESTATES
3275 CO RD 100
CARBONDALE, CO 81623-

(970) 963-9397

APPROVED WELL LOCATION

GARFIELD COUNTY
SE 1/4 NW 1/4 Section 31
Township 7 S Range 87 W Sixth P.M.

DISTANCES FROM SECTION LINES

1603 Ft. from North Section Line
2220 Ft. from West Section Line

PERMIT TO USE AN EXISTING WELL (AMENDED)

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

- 1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of this permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
- 2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- 3) Approved pursuant to CRS 37-90-137(2) for the use of an existing well, appropriating ground water tributary to the Roaring Fork River, as an alternate point of diversion to the Basalt Conduit, on the condition that the well shall be operated only when the Basalt Water Conservancy District's substitute water supply plan, approved by the State Engineer, is in effect and when a water allotment contract between the well owner and the Basalt Water Conservancy District for the release of replacement water from Ruedi Reservoir is in effect, or under an approved plan for augmentation. BWCD contract #343.
- 4) The use of ground water from this well is limited to ordinary household purposes inside 47 single family dwellings and three employee dwellings, the irrigation of not more than 3.4 acres of gardens and lawns, the watering of livestock, and commercial uses associated with an equestrian facility. All use of this well will be curtailed unless the water allotment contract or a plan for augmentation is in effect.
- 5) The simultaneous maximum pumping rate of this well and any other well operating under BWCD contract #343 shall not exceed 100 GPM.
- 6) The combined annual amount of ground water to be appropriated by this well and any other well operating under BWCD contract #343 shall not exceed 36.4 acre-feet. This well is known as the Pinto Well.
- 7) The owner shall mark the well in a conspicuous place with well permit number(s), name of the aquifer, and court case number(s) as appropriate. The owner shall take necessary means and precautions to preserve these markings.
- 8) This well shall be located not more than 200 feet from the location specified on this permit and not less than 600 feet from any existing well, not owned by the applicant.
- 9) A totalizing flow meter must be installed on this well and maintained in good working order. Permanent records of all diversions must be maintained by the well owner (recorded at least annually) and submitted to the Division Engineer upon request.
- 10) Approved for the installation of a pump in, and the use of, an existing well, constructed on October 10, 1999, under monitoring hole notice MH-36529-B. JD 3-1-2000

APPROVED
JD2

State Engineer

Receipt No. 0453792A

DATE ISSUED FEB 17 2000

By

EXPIRATION DATE FEB 17 2000

TOTAL P. 05

**BASALT WATER CONSERVANCY DISTRICT
WATER ALLOTMENT CONTRACT NO. 343
Pursuant to C.R.S. 1973, 37-45-131**

Jay Weinberg (hereinafter "Applicant") has applied to the Basalt Water Conservancy District (hereinafter the "District"), a political subdivision of the State of Colorado, organized pursuant to and existing by virtue of Colorado Revised Statutes, 1973, 37-45-101, et seq., for an allotment Contract for beneficial use of water rights owned, leased, or hereafter acquired by the District. By execution of this Contract, Applicant agrees to the following terms and conditions:

1. QUANTITY: In consideration of the covenants and conditions herein contained, Applicant shall be entitled to receive and apply to beneficial use 0.23 cubic feet of water per second from the District's direct flow rights and 38.2 acre feet per year (35.6 acre feet for domestic use and 2.6 acre feet for commercial use) of storage or other augmentation water owned or controlled by the District.

2. SOURCE OF ALLOTTED WATER: Water rights allotted pursuant to this Contract shall be from the District's water rights decreed to the Basalt Conduit, Landis Canal, Stockman's Ditch Extension, Troy and Edith Ditch, Robinson Ditch, or other decrees or water rights hereafter acquired by the District, including the District's contractual right to receive storage water from Ruedi Reservoir and Green Mountain Reservoir. The District shall have the right to designate the water right or Decree of the District from which the Applicant's allotted rights shall be obtained. The Applicant's use of any of the District's water rights shall be subject to any and all terms and conditions imposed by the Water Court on the use of the District's said rights. Exchange or augmentation releases made from the District's storage rights in Ruedi or Green Mountain Reservoirs or other works and facilities of the District shall be delivered to the Applicant at the outlet works of said storage facility and release of water at such outlet works shall constitute full performance of the District's delivery obligation. Delivery of water from the District's storage rights in Ruedi or Green Mountain Reservoir shall be subject to the District's lease contract with the United States Bureau of Reclamation and any rules and regulations promulgated pursuant thereto.

3. PURPOSE AND LOCATION OF USE: Applicant will use the waters herein granted for beneficial purposes limited to the augmentation of existing and future wells and other water sources, within or through facilities or upon lands owned, operated, or served by Applicant, which lands are described on Exhibit "A" attached hereto; provided that the location and purpose of Applicant's use of said water shall be legally recognized and permitted by the applicable governmental authority having jurisdiction over the property served. Applicant's contemplated usage for the water allotted hereunder is for the following use or uses:

Domestic/Municipal Industrial Commercial Agricultural
Other _____

Applicant acknowledges that usage of the District's water rights as herein contemplated shall be in lieu of or supplemental to Applicant obtaining or adjudicating, on its own, the right to use

certain waters. It is acknowledged that certain locations within the District may not be susceptible to service solely by the District's water rights allotted hereunder or the District's said water rights may not satisfy Applicant's needs and purposes. To the extent that service cannot be achieved by use of the District's allotted water rights, or in the event said service is inadequate, Applicant may, utilize such other water rights, by way of supplementing the District's water rights, or otherwise, as is necessary to assure water service sufficiently reliable for Applicant's intended purpose or purposes. All lands, facilities and areas served by water rights allotted hereunder shall be situated within the boundaries of the District. The District reserves the exclusive right to review and approve any conditions which may be attached to judicial approval of Applicant's use of the District's water rights allotted hereunder. Applicant agrees to defray any out-of-pocket expenses incurred by the District in connection with the allotment of water rights hereunder, including, but not limited to, reimbursement of legal and engineering costs incurred in connection with any water rights adjudication necessary to allow Applicant's use of such allotted water rights; provided, however, in the event any such adjudication involves more of the District's water rights than are allotted pursuant to this Contract, Applicant shall bear only a pro-rata portion of such expenses. Applicant shall be solely responsible for providing works and facilities, if any, necessary to utilize the District's water rights allotted hereunder for Applicant's beneficial use.

Water service provided by the District shall be limited to the amount of water available in priority at the original point of diversion of the District's applicable water right and neither the District, nor those entitled to utilize the District's decrees, may call on any greater amount at new or alternate points of diversion. The District shall request the Colorado State Engineer to estimate any conveyance losses between the original point and any alternate point and such estimate shall be deducted from this amount in each case. The District, or anyone using the District's decrees, may call on any additional sources of supply that may be available at an alternate point of diversion, but not at the original point of diversion, only as against water rights which are junior to the date of application for the alternate point of diversion.

In the event the Applicant intends to develop an augmentation plan and institute legal proceedings for the approval of such augmentation plan to allow the Applicant to utilize the water allotted to Applicant hereunder, the Applicant shall give the District written notice of such intent. In the event the Applicant develops and adjudicates an augmentation plan to utilize the water allotted hereunder, Applicant shall not be obligated to bear or defray any legal or engineering expense of the District incurred by the District for the purpose of developing and adjudicating a plan of augmentation for the District. In any event, the District shall have the right to approve the Applicant's augmentation plan and the Applicant shall provide the District copies of such plan and of all pleadings and other papers filed with the Water Court in the adjudication thereof.

4. PAYMENT: Applicant shall pay annually for the water service described herein at a price to be fixed annually by the Board of Directors of the District for such service. Payment of the annual fee shall be made, in full, within fifteen (15) days after the date of a notice from the District that the payment is due. Said notice will advise the Applicant, among other things, of the water delivery year to which the payment shall apply and the price which is applicable to that year. If a payment is not made by the due date, written notice thereof will be sent by the District to the Applicant at Applicant's address set forth below. If payment is not made within thirty (30) days after

said written notice, the District may, at its option, elect to terminate all of the Applicant's right, title, or interest under this Contract, in which event the water right allotted hereunder may be transferred, leased or otherwise disposed of by the District at the discretion of its Board of Directors.

In the event water deliveries hereunder are made by or pursuant to agreement with some other person, corporation, quasi-municipal entity, or governmental entity, and in the event the Applicant fails to make payments as required hereunder, the District may, at its sole option and request, authorize said person or entity to curtail the Applicant's water service pursuant to this Contract, and in such event neither the District nor such persons or entity shall be liable for such curtailment.

5. APPROPRIATION OF FUNDS: The Applicant agrees that so long as this Contract is valid and in force, Applicant will budget and appropriate from such sources of revenues as may be legally available to the Applicant the funds necessary to make the annual payments in advance of water delivery pursuant to this Contract. The Applicant will hold harmless the District and any person or entity involved in the delivery of water pursuant to this Contract, for discontinuance in service due to the failure of Applicant to maintain the payments herein required on a current basis.

6. BENEFIT OF CONTRACT: The water right allotted hereunder shall be beneficially used for the purposes and in the manner specified herein and this Contract is for the exclusive benefit of the Applicant and shall not inure to the benefit of any successor, assign, or lessee of said Applicant without the prior written approval of the Board of Directors of the District.

In the event the water right allotted hereunder is to be used for the benefit of land which is now or will hereafter be subdivided or otherwise held or owned in separate ownership interest by two (2) or more uses of the water right allotted hereunder, the Applicant may assign the Applicant's rights hereunder only to a homeowners association, water district, water and sanitation district or other special district properly organized and existing under and by virtue of the laws of the State of Colorado and then only if such association or special district establishes to the satisfaction of the Basalt Water Conservancy District that it has the ability and authority to assure its performance of the Applicant's obligations under this Contract. In no event shall the owner of a portion, but less than all, of the Applicant's property to be served under this Contract, have any rights hereunder, except as such rights may exist through a homeowners association or special district as above provided. Any assignment of the Applicant's rights under this Contract shall be subject to and must comply with such requirements as the District may hereafter adopt regarding assignment of Contract rights and the assumption of Contract obligations by assignees and successors, provided that such requirements shall uniformly apply to all allottees receiving District service. The restrictions on assignment as herein contained shall not preclude the District from holding the Applicant, or any successor to the Applicant, responsible for the performance of all or any part of the Applicant's covenants and agreements herein contained.

7. OTHER RULES: Applicant's rights under this Contract shall be subject to the Water Service Plan as adopted by the District and amended from time to time; provided that such Water Service Plan shall apply uniformly throughout the District among water users receiving the same service from the District. Applicant shall also be bound by the provisions of the Water Conservancy Act of the State of Colorado, the Rules and Regulations of the Board of Directors of the District, the

plumbing advisory, water conservation, and staged curtailment regulations, if any, applicable within the County in which the water allotted hereunder is to be used, together with all amendments of and supplements to any of the foregoing.

8. CURTAILMENT OF USE: The water service provided hereunder is expressly subject to the provisions of that certain Stipulation in Case No. 80 CW 253 on file in the District Court in Water Division 5 of the State of Colorado, which Stipulation provides, in part, for the possible curtailment of out-of-house municipal and domestic water demands upon the occurrence of certain events and upon the District giving notice of such curtailment, all as more fully set forth in said Stipulation.

9. OPERATION AND MAINTENANCE AGREEMENT: Applicant shall enter into an "Operation and Maintenance Agreement" with the District if and when the Board of Directors finds and determines that such an agreement is required by reason of additional or special services requested by the Applicant and provided by the District or by reason of the delivery or use of water by the Applicant for more than one of the classes of service which are defined in the Rules and Regulations of the Board of Directors of said District. Said agreement may contain, but not be limited to, provision for water delivery at times or by means not provided within the terms of standard allotment contracts of the District and additional annual monetary consideration for extension of District services and for additional administration, operation and maintenance costs, or for other costs to the District which may arise through services made available to the Applicant.

10. CHANGE OF USE: The District reserves the exclusive right to review and approve or disapprove any proposed change in use of the water right allotted hereunder. Any use other than that set forth herein or any lease or sale of the water or water rights allotted hereunder without the prior written approval of the District shall be deemed to be a material breach of this Contract.

11. PRIOR RESOLUTION: The water service provided hereunder is expressly subject to that certain Resolution passed by the Board of Directors of the District on September 25, 1979, and all amendments thereto, as the same exists upon the date of this application and allotment Contract.

12. NO FEE TITLE: It is understood and agreed that nothing herein shall give the Applicant any equitable or legal fee title interest or ownership in or to any of the water or water rights of the District, but that Applicant is entitled to the right to use the water right allotted hereunder, subject to the limitations, obligations and conditions of this Contract.

13. CONSERVATION PRACTICES: Applicant shall implement and use commonly accepted conservation practices with respect to the water and water rights allotted hereunder and shall be bound by any conservation plan hereafter adopted by the District, as the same may be amended from time to time.

14. WELL SPACING REQUIREMENTS: Applicant must comply with the well-spacing requirements set forth in C.R.S. §37-90-137, as amended, if applicable. Compliance with said

EXHIBIT A

Scarrow and Walker, Inc.

Reg. Land Surveyors and Engineers
811 Colorado Avenue
Glenwood Springs, Colorado 81601
(303) 945-8664



PROPERTY DESCRIPTION

A parcel of land situated in a portion of Lots 3, 4, 6, 17, 18 and 19 of Section 31, Township 7 South, Range 87 West of the Sixth Principal Meridian, County of Garfield, State of Colorado, said parcel being more particularly described as follows:

Commencing at the Witness Corner to the Northeast Corner of said Section 31, a stone in place; thence S.60°01'05"W. 2350.39 feet to the Southeast Corner of Reception No. 279416, also being a point on the westerly right-of-way of County Road No. 100, a rebar and cap L.S. No. 10732 in place, the True Point of Beginning; thence S.00°11'29"W. along said westerly right-of-way 827.14 feet to a rebar and cap L.S. No. 10732 in place; thence continuing along said westerly right-of-way S.03°56'29"W. 117.74 feet to a rebar and cap L. S. No. 10732 in place; thence continuing along said westerly right-of-way S.11°37'27"W. 299.44 feet; thence leaving said westerly right-of-way N.72°41'32"W. along a line being northerly of Blue Creek 136.34 feet; thence continuing along a line being northerly of Blue Creek N.77°44'52"W. 317.09 feet; thence continuing along a line being northerly of Blue Creek N.62°48'46"W. 375.98 feet; thence continuing along a line being northerly of Blue Creek N.41°30'29"W. 89.74 feet; thence continuing along a line being northerly of Blue Creek N.81°01'17"W. 285.92 feet; thence N.13°12'20"E. 120.00 feet to a point in an existing fence; thence N.76°47'40"W. along said existing fence 1038.73 feet to a point on the easterly line of Parcel B of Reception No. 375658 (from whence rebar and cap L.S. No. 10732 bears S.00°00'18"W. 263.28 feet); thence N.00°00'18"E. along said easterly line 1013.61 feet to a point on the southerly right-of-way of Colorado State Highway No. 82 as evidenced by existing right-of-way monuments and the existing centerline (whence a rebar and cap L.S. No. 3317 bears S.00°00'18"W. 3.99 feet); thence S.79°56'55"E. along said southerly right-of-way 1982.77 feet; thence S.10°30'58"W. along the easterly line of said Reception No. 279416 133.47 feet to a rebar and cap L.S. No. 10732 in place; thence S.79°44'32"E. along the southerly line of said Reception No. 279416 247.29 feet to the True Point of Beginning; said parcel containing 57.889 acres, more or less.

Together with a perpetual easement being a portion of Parcel "B" shown in Reception No. 375658 situated in a portion of Lot 17 of Section 31, Township 7 South, Range 87 West of the Sixth Principal Meridian, County of Garfield, State of Colorado; said easment being more particularly described as follows:

Commencing at the Witness Corner to the Northeast Corner of said Section 31, a stone in place; thence S.81°10'28"W. 4257.59 feet to a point on the southerly right-of-way of State Highway No. 82, the True Point of Beginning; thence S.00°00'18"W. along the easterly line of said Parcel "B" 1013.61 feet to a point on an existing fence; thence N.76°47'40"W. along said fence 67.27 feet to a point on the westerly line of said Parcel "B"; thence N.00°07'35"E. along said westerly line 1009.48 feet to a point on the southerly right-of-way of said State Highway No. 82; thence S.79°56'55"E. along said southerly right-of-way 64.35 feet to the True Point of Beginning; said easement containing 1.496 acres, more or less.

December 2, 1987

**BASALT WATER CONSERVANCY DISTRICT
WATER ALLOTMENT CONTRACT NO. 383
Pursuant to C.R.S. 1973, 37-45-131**

Blue Creek Land Holdings, L.L.C. (hereinafter "Applicant") has applied to the Basalt Water Conservancy District (hereinafter the "District"), a political subdivision of the State of Colorado, organized pursuant to and existing by virtue of Colorado Revised Statutes, 1973, 37-45-101, et seq., for an allotment Contract for beneficial use of water rights owned, leased, or hereafter acquired by the District. By execution of this Contract, Applicant agrees to the following terms and conditions and those certain terms and conditions set forth in the attached Order, which is fully incorporated as a part of this Contract:

1. QUANTITY: In consideration of the covenants and conditions herein contained, Applicant shall be entitled to receive and apply to beneficial use 0.22 cubic feet of water per second from the District's direct flow rights and 12.9 acre feet per year of storage or other augmentation water owned or controlled by the District (12.3 AF to be used for domestic purposes and 0.3 AF for commercial purposes). Applicant shall restrict actual diversions and consumptive use under this Contract to these amounts.

2. SOURCE OF ALLOTTED WATER: Water rights allotted pursuant to this Contract shall be from the District's water rights decreed to the Basalt Conduit, Landis Canal, Stockman's Ditch Extension, Troy and Edith Ditch, Robinson Ditch, or other decrees or water rights hereafter acquired by the District, including the District's contractual right to receive storage water from Ruedi Reservoir and Green Mountain Reservoir. The District shall have the right to designate the water right or Decree of the District from which the Applicant's allotted rights shall be obtained. The Applicant's use of any of the District's water rights shall be subject to any and all terms and conditions imposed by the Water Court on the use of the District's said rights. Exchange or augmentation releases made from the District's storage rights in Ruedi or Green Mountain Reservoirs or other works and facilities of the District shall be delivered to the Applicant at the outlet works of said storage facility and release of water at such outlet works shall constitute full performance of the District's delivery obligation. Delivery of water from the District's storage rights in Ruedi or Green Mountain Reservoir shall be subject to the District's lease contract with the United States Bureau of Reclamation and any rules and regulations promulgated pursuant thereto. Releases from other facilities available to the District shall be subject to the contracts, laws, rules, and regulations governing releases therefrom. Furthermore, the District hereby expressly reserves the right to store water and to make exchange releases from structures that may be built or controlled by the District in the future, so long as the water service to the Applicant pursuant to this agreement is not impaired by said action.

3. PURPOSE AND LOCATION OF USE: Applicant will use the water rights allotted pursuant to this Contract for beneficial purposes by diversion at Applicant's point of diversion under the District's direct flow water rights and/or by use of augmentation or exchange water owned or controlled by the District. Applicant will use the water allotted by the District within or through facilities or upon lands owned, operated, or served by Applicant, which lands are described on Exhibit "A" attached hereto; provided that the location and purpose of Applicant's use of said water shall be legally recognized and permitted by the applicable governmental authority having

jurisdiction over the property served. Applicant's contemplated usage for the water allotted hereunder is for the following use or uses:

Domestic/Municipal (12.6 AF) Industrial Commercial (0.3 AF) Agricultural
Other _____

It is acknowledged that certain locations within the District may not be susceptible to service solely by the District's water rights allotted hereunder or the District's said water rights may not satisfy Applicant's needs and purposes. To the extent that service cannot be achieved by use of the District's allotted water rights, or in the event said service is inadequate, Applicant may utilize such other water rights, by way of supplementing the District's water rights, or otherwise, as is necessary to assure water service sufficiently reliable for Applicant's intended purpose or purposes.

All lands, facilities and areas served by water rights allotted hereunder shall be situated within the boundaries of the District.

Any quantity of the Applicant's allocation not delivered to or used by Applicant by the end of each water year, shall revert to the water supplies of the District. Such reversion shall not entitle Applicant to any refund of payment made for such water.

Water service provided by the District shall be limited to the amount of water available in priority at the original point of diversion of the District's applicable water right and neither the District, nor those entitled to utilize the District's decrees, may call on any greater amount at new or alternate points of diversion. The District shall request the Colorado State Engineer to estimate any conveyance losses between the original point and any alternate point and such estimate shall be deducted from this amount in each case. The District, or anyone using the District's decrees, may call on any additional sources of supply that may be available at an alternate point of diversion, but not at the original point of diversion, only as against water rights which are junior to the date of application for the alternate point of diversion.

In the event the Applicant intends to institute any legal proceedings for the approval of an augmentation plan and/or any change to an alternate point of diversion of the District's water right to allow the Applicant to utilize the water allotted hereunder, the Applicant shall give the District written notice of such intent. In the event the Applicant develops and adjudicates an alternate point of diversion and/or an augmentation plan to utilize the water allotted hereunder, Applicant shall not be obligated to bear or defray any legal or engineering expense of the District incurred by the District for the purpose of developing and adjudicating a plan of augmentation for the District. In any event, the District shall have the right to approve the Applicant's application for change of water right, and/or augmentation plan or other water supply plan involving the District's rights, and the Applicant shall provide the District copies of such application and of all pleadings and other papers filed with the Water Court in the adjudication thereof.

The District reserves the exclusive right to review and approve any conditions which may be attached to judicial approval of Applicant's use of the District's water rights allotted hereunder. Applicant agrees to defray any out-of-pocket expenses incurred by the District in connection with the allotment of water rights hereunder, including, but not limited to, reimbursement of legal and engineering costs incurred in connection with any water rights adjudication necessary to allow

Applicant's use of such allotted water rights; provided, however, in the event any such adjudication involves more of the District's water rights than are allotted pursuant to this Contract, Applicant shall bear only a pro-rata portion of such expenses. Applicant shall be solely responsible for providing the structures, works and facilities, if any, necessary to utilize the District's water rights allotted hereunder for Applicant's beneficial use.

4. PAYMENT: Applicant shall pay annually for the water service described herein at a price to be fixed annually by the Board of Directors of the District for such service. Payment of the annual fee shall be made, in full, within fifteen (15) days after the date of a notice from the District that the payment is due. Said notice will advise the Applicant, among other things, of the water delivery year to which the payment shall apply and the price which is applicable to that year. If a payment is not made by the due date, a late fee of \$50 (or such other amount as the Board may set from time to time) will be assessed and final written notice of the delinquent account and late fee assessment will be sent by the District to the Applicant at Applicant's address set forth below. If payment is not made within thirty (30) days after said final written notice, the District may, at its option, elect to terminate all of the Applicant's right, title, or interest under this Contract, in which event the water right allotted hereunder may be transferred, leased or otherwise disposed of by the District at the discretion of its Board of Directors.

In the event water deliveries hereunder are made by or pursuant to agreement with some other person, corporation, quasi-municipal entity, or governmental entity, and in the event the Applicant fails to make payments as required hereunder, the District may, at its sole option and request, authorize said person or entity to curtail the Applicant's water service pursuant to this Contract, and in such event neither the District nor such persons or entity shall be liable for such curtailment.

5. APPROPRIATION OF FUNDS: The Applicant agrees that so long as this Contract is valid and in force, Applicant will budget and appropriate from such sources of revenues as may be legally available to the Applicant the funds necessary to make the annual payments in advance of water delivery pursuant to this Contract. The Applicant will hold harmless the District and any person or entity involved in the delivery of water pursuant to this Contract, for discontinuance in service due to the failure of Applicant to maintain the payments herein required on a current basis.

6. BENEFIT OF CONTRACT: The water right allotted hereunder shall be beneficially used for the purposes and in the manner specified herein and this Contract is for the exclusive benefit of the Applicant and shall not inure to the benefit of any successor, assign, or lessee of said Applicant without the prior written approval of the Board of Directors of the District.

Upon the sale of the real property to which this Contract pertains, Applicant has a duty to make the buyer aware of this Contract and the need to assign the Contract to the buyer. However, prior written approval of the Board of Directors of the District is required before the assignment is effective. Payment of an assignment fee in an amount determined by the Board shall be required as a prerequisite to approval of the assignment.

In the event the water right allotted hereunder is to be used for the benefit of land which is now or will hereafter be subdivided or otherwise held or owned in separate ownership interest, the Applicant may assign the Applicant's rights hereunder only to a homeowners association, water district, water and sanitation district or other special district properly organized and existing under

and by virtue of the laws of the State of Colorado and then only if such association or special district establishes to the satisfaction of the Basalt Water Conservancy District that it has the ability and authority to assure its performance of the Applicant's obligations under this Contract. In no event shall the owner of a portion, but less than all, of the Applicant's property to be served under this Contract have any rights hereunder, except as such rights may exist through a homeowners association or special district as above provided.

Any assignment of the Applicant's rights under this Contract shall be subject to and must comply with such requirements as the District has adopted or may hereafter adopt regarding assignment of Contract rights and the assumption of Contract obligations by assignees and successors, provided that such requirements shall uniformly apply to all allottees receiving District service. The restrictions on assignment as herein contained shall not preclude the District from holding the Applicant, or any successor to the Applicant, responsible for the performance of all or any part of the Applicant's covenants and agreements herein contained.

7. OTHER RULES: Applicant's rights under this Contract shall be subject to the Water Service Plan as adopted by the District and amended from time to time; provided that such Water Service Plan shall apply uniformly throughout the District among water users receiving the same service from the District. Applicant shall also be bound by all applicable law, including, for example, the provisions of the Water Conservancy Act of the State of Colorado, the Rules and Regulations of the Board of Directors of the District, the plumbing advisory, water conservation, and staged curtailment regulations, if any, applicable within the County in which the water allotted hereunder is to be used, together with all amendments of and supplements to any of the foregoing.

8. CURTAILMENT OF USE: The water service provided hereunder is expressly subject to the provisions of that certain Stipulation in Case No. 81CW253 on file in the District Court in Water Division 5 of the State of Colorado, which Stipulation provides, in part, for the possible curtailment of out-of-house municipal and domestic water demands upon the occurrence of certain events and upon the District giving notice of such curtailment, all as more fully set forth in said Stipulation.

9. OPERATION AND MAINTENANCE AGREEMENT: Applicant shall enter into an "Operation and Maintenance Agreement" with the District if and when the Board of Directors finds and determines that such an agreement is required by reason of additional or special services requested by the Applicant and provided by the District or by reason of the delivery or use of water by the Applicant for more than one of the classes of service which are defined in the Rules and Regulations of the Board of Directors of said District. Said agreement may contain, but not be limited to, provision for water delivery at times or by means not provided within the terms of standard allotment contracts of the District and additional annual monetary consideration for extension of District services and for additional administration, operation and maintenance costs, or for other costs to the District which may arise through services made available to the Applicant.

10. CHANGE OF USE: The District reserves the exclusive right to review and approve or disapprove any proposed change in use of the water right allotted hereunder. Any use other than that set forth herein or any lease or sale of the water or water rights allotted hereunder without the prior written approval of the District shall be deemed to be a material breach of this Contract.

11. PRIOR RESOLUTION: The water service provided hereunder is expressly subject to that certain Resolution passed by the Board of Directors of the District on September 25, 1979, and all amendments thereto, as the same exists upon the date of this application and allotment Contract.

12. NO FEE TITLE: It is understood and agreed that nothing herein shall give the Applicant any equitable or legal fee title interest or ownership in or to any of the water or water rights of the District, but that Applicant is entitled to the right to use the water right allotted hereunder, subject to the limitations, obligations and conditions of this Contract.

13. COMPLIANCE WITH SECTION 404 OF THE CLEAN WATER ACT. Applicant shall comply with Section 404 of the Clean Water Act and consult with the Army Corps of Engineers to complete any Section 404 compliance that may be required as a result of the construction of any facilities necessary to use contract water.

14. CONSERVATION PRACTICES: Applicant shall implement and use commonly accepted conservation practices with respect to the water and water rights allotted hereunder and shall be bound by any conservation plan hereafter adopted by the District, as the same may be amended from time to time.

15. WELL PERMIT: If Applicant intends to divert through a well, then Applicant must provide to District a copy of Applicant's valid well permit before the District is obligated to deliver any water hereunder, and it is the Applicant's continuous duty to maintain a valid well permit. Applicant shall also comply with all restrictions and limitations set forth in the well permit obtained from the Colorado Division of Water Resources. Applicant must comply with the well-spacing requirements set forth in C.R.S. §37-90-137, as amended, if applicable. Compliance with said statutory well-spacing criteria shall be an express condition of the extension of service hereunder, and the District shall in no way be liable for an Applicant's failure to comply.

16. MEASURING DEVICE OR METER: Applicant agrees to provide, at its own expense, a totalizing flow meter with remote readout to continuously and accurately measure at all times all water diverted pursuant to the terms of Applicant's water right and the terms of this Contract. Applicant agrees to provide accurate readings from such device or meter to District upon District's request. Applicant acknowledges that failure to comply with this paragraph could result in legal action to terminate Applicant's diversion of water by the State of Colorado Division of Water Resources. By signing this Contract, Applicant hereby specifically allows District, through its authorized agent, to enter upon Applicant's property during ordinary business hours for the purposes of determining Applicant's actual use of water.

17. CONTRACT TERMINATION:

A. Termination by District:

1. The District may terminate this Contract for any violation or breach of the terms of this Contract by Applicant.

QUIT CLAIM DEED

THIS DEED, made this 28th day of September, 2000 between WILLIAM J. GILLIGAN AND JAYNE M. GILLIGAN

grantor, whose street address is: 3400 ADAMS ROAD, OAK BROOK, IL 60523

County of _____, State of Illinois, for the consideration of Ten Dollars and other good and valuable consideration ***** Dollars in hand paid, hereby sells and quitclaims to: BLUE CREEK LAND HOLDINGS, L.L.C., A COLORADO LIMITED LIABILITY COMPANY

grantee, whose street address is: 19351 HIGHWAY 82, CARBONDALE, CO 81623

County of Garfield, State of Colorado, the following legally described water rights: SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART THEREOF

Appurtenant to: SEE EXHIBIT "B" ATTACHED HERETO AND MADE A PART THEREOF.

Signed as of the day and year first above written.

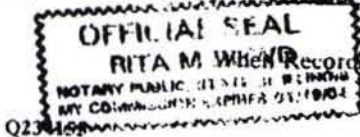
Handwritten signatures of William J. Gilligan and Jayne M. Gilligan over their printed names.

State of Illinois) County of Cook) ss.

The foregoing instrument was acknowledged before me this 28th day of September, 2000 by WILLIAM J. GILLIGAN AND JAYNE M. GILLIGAN

Witness my hand and official seal.

My commission expires:



Handwritten signature of Rita M. Whelan, Notary Public, BLUE CREEK LAND HOLDINGS, L.L.C., A COLORADO LIMITED LIABILITY COMPANY, 19351 HIGHWAY 82, CARBONDALE, CO 81623

EXHIBIT "A"

WATER RIGHTS

1. 26.5/150th of all right, title and interest originally acquired by T.O. Ranch Company of Colorado in and to Basin Ditch No. 45, under original Priority Nos. 49 and 108, that being an amount of 0.176 c.f.s. in each priority, and 26.5/150th interest in 33.2 c.f.s. under Priority No. 294, that being 5.865 c.f.s. (said original interest in T.O. Ranch Company of Colorado being an undivided 1/5 interest in and to said Priority Nos. 49 and 108).
2. An undivided 11/38th interest in and to all right, title and interest originally acquired by T.O. Ranch Company of Colorado in and to Middle Ditch No. 68, under original priority No. 83, that being 0.96 c.f.s., (said original interest of T.O. Ranch Company of Colorado being an undivided 2/3 interest therein).
3. 37/76th interest of all right, title and interest originally acquired by T.O. Ranch Company of Colorado in and to Lower Ditch No. 21 under original priority No. 23, that being 0.365 c.f.s., (said original interest of T.O. Ranch Company of Colorado being an undivided one-half interest in and to priority No. 23), and a 45/134th interest as to priority No. 721, that being 3.996 c.f.s., (said interest being the entire original interest acquired by T.O. Ranch Company of Colorado).
4. Underground water rights in "T.O. Well," identified as Colorado State Engineer's No. 10560, with priority date of June 5, 1961, described in Case No. W-849, in the District Court in and for Water Division No. 5, State of Colorado, estimated to be 0.11 c.f.s.
5. All of applicant William J. Gilligan's right, title and interest in and to the C.C.Cerise Gilligan Ditch, decreed for 3.0 c.f.s. in Case No. 90W196 in Water Division No. 5 on August 31, 1992, with an appropriation date of February 20, 1988.

EXHIBIT B

A PARCEL OF LAND SITUATED IN THE UNITED STATES GOVERNMENT LOTS 1, 2, 6, 7, 11 AND THE NORTHEAST QUARTER SOUTHWEST QUARTER OF SECTION 31, TOWNSHIP 7 SOUTH, RANGE 87 WEST OF THE SIXTH PRINCIPAL MERIDIAN, GARFIELD COUNTY, COLORADO, SAID PARCEL IS LOCATED SOUTHERLY OF COLORADO STATE HIGHWAY NO. 82, EASTERLY OF GARFIELD COUNTY ROAD 100 AND NORTHERLY OF THE DENVER AND RIO GRANDE WESTERN RAILROAD RIGHT-OF-WAY, AND IS MORE FULLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWESTERLY CORNER OF SAID GOVERNMENT LOT 2, SECTION 31, THENCE SOUTH 00 DEGREES 55'02" EAST, A DISTANCE OF 1197.02 FEET TO THE INTERSECTION OF SAID COUNTY ROAD 100 EASTERLY RIGHT-OF-WAY WITH THE SOUTHERLY RIGHT-OF-WAY OF COLORADO STATE HIGHWAY NO. 82, THE TRUE POINT OF BEGINNING; THENCE EASTERLY ALONG SAID STATE HIGHWAY SOUTHERLY RIGHT-OF-WAY THE FOLLOWING:

NORTH 81 DEGREES 01'05" EAST, A DISTANCE OF 7.29 FEET TO THE POSITION FOR COLORADO DEPARTMENT OF TRANSPORTATION (CDOT), MONUMENT 529 OF PROJECT NO. CX(FC) 24-0082-26 (MISSING), (SAID POINT IS MARKED BY A WITNESS CORNER MONUMENT, A 5/8" STEEL ROD WITH YELLOW PLASTIC CAP MARKED BUETTNER 13166 WC, AT A DISTANCE OF NORTH 81 DEGREES 01'05" EAST, 2.00 FEET FROM THE CDOT MONUMENT POSITION, SAID WITNESS CORNER MONUMENT IS LOCATED AT THE BASE OF A WIRE FENCE);

THENCE NORTH 81 DEGREES 01'05" EAST, A DISTANCE OF 120.91 FEET TO A CDOT MONUMENT 530 OF SAID CDOT PROJECT;

THENCE NORTH 72 DEGREES 01'13" EAST, A DISTANCE OF 188.81 FEET TO THE CDOT MONUMENT 531 OF SAID PROJECT;

THENCE SOUTH 84 DEGREES 43'15" EAST, A DISTANCE OF 401.16 FEET TO THE CDOT MONUMENT 532 (MISSING NOW MARKED WITH A 5/8" STEEL ROD AND YELLOW PLASTIC CAP MARKED BUETTNER 13166), OF SAID PROJECT;

THENCE SOUTH 78 DEGREES 30'40" EAST, A DISTANCE OF 382.98 FEET TO A WIRE FENCE CORNER;

THENCE DEPARTING SAID STATE RIGHT-OF-WAY SOUTH 00 DEGREES 35'23" WEST, A DISTANCE OF 1834.33 FEET ALONG A WIRE FENCE TO A FENCE CORNER;

THENCE SOUTH 89 DEGREES 16'38" EAST, A DISTANCE OF 231.46 FEET TO A FENCE CORNER;

THENCE SOUTH 00 DEGREES 10' 42" EAST A DISTANCE OF EAST, A DISTANCE OF 785.71 FEET ALONG A WIRE FENCE TO A INTERSECTION WITH THE DENVER AND RIO GRANDE WESTERN RAILROAD NORTHERLY RIGHT-OF-WAY, SAID POINT OF INTERSECTION BEING WITHIN THE ROARING FORK RIVER;

THENCE WESTERLY ALONG SAID NORTHERLY RAILROAD RIGHT-OF-WAY, BEING LOCATED WITHIN THE ROARING FORK RIVER THE FOLLOWING:

SOUTH 80 DEGREES 27'41" WEST, A DISTANCE OF 230.73 FEET;

SOUTH 83 DEGREES 46'38" WEST, A DISTANCE OF 96.97 FEET;

SOUTH 84 DEGREES 11'43" WEST A DISTANCE OF 99.20 FEET;

SOUTH 84 DEGREES 12'11" WEST, A DISTANCE OF 99.74 FEET;

SOUTH 84 DEGREES 12'20" WEST, A DISTANCE OF 99.08 FEET;

SOUTH 84 DEGREES 12'45" WEST, A DISTANCE OF 103.09 FEET;

SOUTH 84 DEGREES 06'14" WEST, A DISTANCE OF 97.41 FEET;

SOUTH 84 DEGREES 09'08" WEST, A DISTANCE OF 100.70 FEET;

SOUTH 84 DEGREES 53'34" WEST, A DISTANCE OF 96.53 FEET;

SOUTH 86 DEGREES 56'14" WEST, A DISTANCE OF 93.61 FEET;

NORTH 89 DEGREES 35'50" WEST, A DISTANCE OF 93.75 FEET;

NORTH 86 DEGREES 21'01" WEST, A DISTANCE OF 94.46 FEET;

NORTH 82 DEGREES 59'43" WEST, A DISTANCE OF 94.93 FEET;

NORTH 79 DEGREES 59'43" WEST A DISTANCE OF 95.24 FEET;

NORTH 77 DEGREES 47'12" WEST, A DISTANCE OF 97.04 FEET;

NORTH 77 DEGREES 19'56" WEST, A DISTANCE OF 99.76 FEET;

NORTH 77 DEGREES 10' 16" WEST, A DISTANCE OF 86.35 FEET TO A INTERSECTION WITH THE EASTERLY RIGHT-OF-WAY OF GARFIELD COUNTY ROAD 100;

THENCE NORTHERLY ALONG SAID EASTERLY RIGHT-OF-WAY THE FOLLOWING COURSES AND CURVES:

THENCE NORTH 36 DEGREES 10' 38" EAST, A DISTANCE OF 92.37 FEET;

THENCE ALONG A CURVE TO THE LEFT 145.86 FEET, THE RADIUS OF SAID CURVE BEING 340.27 FEET, THE CENTRAL ANGLE IS 24 DEGREES 33' 37", THE CURVE LONG CHORD BEARS NORTH 24 DEGREES 23' 49" EAST, A DISTANCE OF 144.75 FEET;

THENCE NORTH 12 DEGREES 07' 00" EAST, A DISTANCE OF 1490.00 FEET;

EXHIBIT B

THENCE ALONG A CURVE TO THE LEFT 296.07 FEET, THE RADIUS OF SAID CURVE BEING 1462.39 FEET, THE CENTRAL ANGLE IS 11 DEGREES 36' 00". THE CURVE LONG CHORD BEARS NORTH 06 DEGREES 19' 00" EAST, A DISTANCE OF 295.57 FEET;
THENCE NORTH 00 DEGREES 30' 48" EAST, A DISTANCE OF 727.56 FEET TO THE TRUE POINT OF BEGINNING.

COUNTY OF GARFIELD
STATE OF COLORADO

STATE OF COLORADO

Bill Owens, Governor
Jane E. Norton, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, Colorado

Laboratory and Radiation Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090

<http://www.cdphc.state.co.us>



Colorado Department
of Public Health
and Environment

May 24, 2001

Thomas A. Zancanella, PE
Zancanella and Associates, Inc.
PO Box 1908
1005 Cooper Avenue
Glenwood Springs, CO 81602

Re: Proposed Blue Creek Ranch WWTP, Garfield County

Dear Mr. Zancanella:

The Colorado Department of Public Health and Environment, Water Quality Control Division, has completed your request for preliminary effluent limits (PELs) for the proposed Blue Creek Ranch wastewater treatment plant (WWTP). Your current proposal is for a WWTP with a hydraulic design capacity of 0.02 million gallons per day (MGD).

This proposed facility would discharge into the Roaring Fork River in the NW1/4 of SE1/4, Section 31, Township 7 South, Range 87 West of the 6th P.M. in Garfield County. This portion of the Roaring Fork River is identified as stream segment COUCRF03, which means the Upper Colorado River Basin, Roaring Fork River Subbasin, Stream Segment 3. This stream segment is composed of the "Mainstem of the Roaring Fork River, including all tributaries, wetlands, lakes and reservoirs from a point immediately below the confluence with Hunter Creek, to the confluence with the Colorado River except for those tributaries included in Segment 1 and specific listings in Segments 3a through 10." These identifications are found in the *Classification and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12)*.

Effluent limits for specific constituents are based on the type of permit a facility will require after construction. The Blue Creek Ranch WWTP may be covered by a general permit.

The preliminary effluent limitations were developed for the Blue Creek Ranch WWTP based on effluent limits established in the *Regulations for Effluent Limitations* for a WWTP consisting of a mechanical wastewater treatment process, as well as the water quality-based effluent limits necessary for protection of the water quality of the Roaring Fork River. A PELs evaluation is attached to document the findings and decisions that were used to derive the PELs in Table 1.

Proposed Blue Creek Ranch WWTP

Thomas A. Zancanella, PE

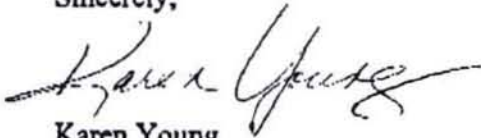
May 24, 2001

Page 2

BOD ₅ (mg/l)	45 (7-day average), 30 (30-day average)
BOD ₅ (% removal)	85 (30-day average)
TSS, mechanical plant (mg/l)	45 (7-day average), 30 (30-day average)
TSS, mechanical plant only (% removal)	85 (30-day average)
Oil and Grease (mg/l)	10 (maximum)
pH (s.u.)	6.5-9.0 (minimum-maximum)
Fecal Coliform (organisms/100 ml)	12,000 (7-day average), 6,000 (30-day average)
Total Residual Chlorine (mg/l)	0.5 (maximum)

If you have any questions regarding this matter, please contact me at (303) 692-3614.

Sincerely,



Karen Young
Environmental Protection Specialist
Permits Unit, Water Quality Protection Section
Water Quality Control Division

ENCLOSURE

cc: Local Health Department
Dwain Watson, District Engineer, Grand Junction Office
Tom Bennett, Drinking Water and Wastewater Technical Services
Garfield County File

Blue Creek Ranch WWTP Preliminary Effluent Limits

PEL-Garfield County

**PRELIMINARY EFFLUENT LIMITS
ROARING FORK RIVER
BLUE CREEK RANCH WWTP**

**Table 1
Assessment Summary**

Blue Creek Ranch WWTP	Name of Facility
CO-PEL	CDPS number
Upper Colorado River Basin, Roaring Fork River Subbasin, Stream Segment 3: Mainstem of the Roaring Fork River, including all tributaries, wetlands, lakes and reservoirs from a point immediately below the confluence with Hunter Creek, to the confluence with the Colorado River except for those tributaries included in Segment 1 and specific listings in Segments 3a through 10. COUCRF03	WBID - Stream Segment
Cold Water Aquatic Life Class 1 Class 1 Recreation Agriculture Water Supply	Classifications
Undesignated	Designation

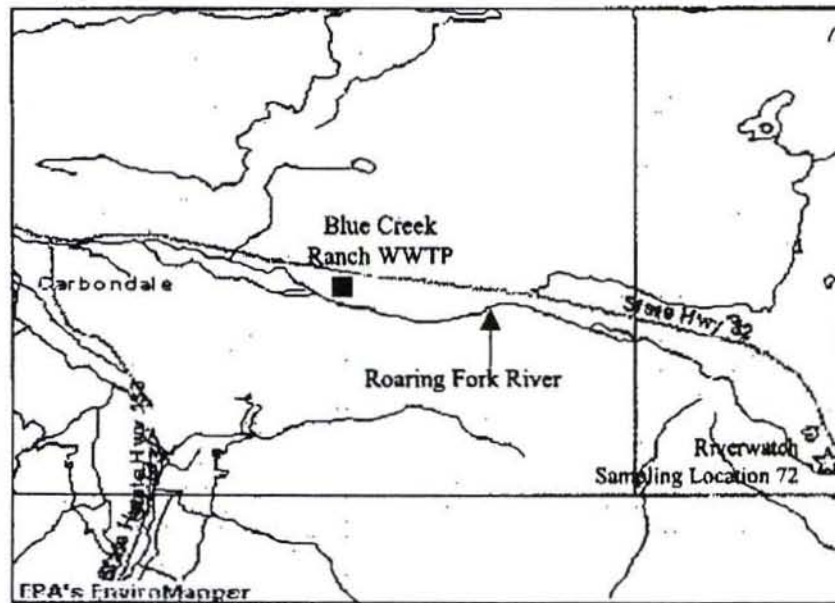
I. Introduction

The Preliminary Effluent Limits (PELs) analysis of the Roaring Fork River near the proposed Blue Creek Ranch Wastewater Treatment Plant (WWTP) was developed for the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division (WQCD). The PELs analysis was prepared to facilitate issuance of a Colorado Discharge Permit System (CDPS) permit for the proposed Blue Creek Ranch WWTP.

Figure 1 on the following page contains a map of the study area evaluated as part of this PEL.

The proposed Blue Creek Ranch WWTP will discharge the Roaring Fork River. The ratio of the low flow of the Roaring Fork River to the design flow of the proposed Blue Creek Ranch WWTP is 6065:1. Although four other facilities discharge within seven miles downstream of the proposed Blue Creek Ranch WWTP, due to the small design flow of the proposed facility versus the high flow rate of the receiving stream, analyses indicate that assimilative capacities are extremely large.

**Figure 1
Study Area**



LEGEND

- Discharges to water
- Superfund sites
- Hazardous waste
- Toxic releases
- Air releases
- Others
- Multiple
- ~ Streets
- ▬ Water Bodies
- Counties

Source: EPA's Enviromapper,
8.2 mi across

Information used in this assessment includes data gathered from the U. S. Geological Survey (USGS), the U.S. Environmental Protection Agency (EPA), Riverwatch, and the WQCD. The data used in the assessment consist of the best information available at the time of preparation of this PELs package.

II. Water Quality

The proposed Blue Creek Ranch WWTP will discharge to the Water Body Identification (WBID) stream segment COUCRF03, which means the Upper Colorado River Basin, Roaring Fork River Subbasin, Stream Segment 3. This segment is composed of the "Mainstem of the Roaring Fork River, including all tributaries, wetlands, lakes and reservoirs from a point immediately below the confluence with Hunter Creek, to the confluence with the Colorado River except for those tributaries included in Segment 1 and specific listings in Segments 3a through 10." Stream segment

Blue Creek Ranch WWTP Preliminary Effluent Limits

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COUCRF03 is classified for Cold Water Aquatic Life Class 1, Class 1 Recreation, Agriculture, and Water Supply.

Numeric standards are developed on a basin-specific basis and are adopted for particular stream segments by the Water Quality Control Commission. To simplify the listing of the segment-specific standards, many of the aquatic life standards are contained in a table at the beginning of each chapter of the regulations. The standards in Table 2 have been assigned to stream segment COUCRF03 in accordance with the *Classification and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12)*.

Table 2	
In-stream Standards for Stream Segment COUCRF03	
<i>Physical and Biological</i>	
Dissolved Oxygen (DO) = 7 mg/l, minimum	
pH = 6.5 - 9.5	
Fecal Coliform = 200 colonies/100 ml	
<i>Inorganic</i>	
Un-ionized ammonia acute = TVS	
Un-ionized ammonia chronic = 0.02 mg/l	
Chlorine acute = 0.019 mg/l	
Chlorine chronic = 0.011 mg/l	
Free Cyanide acute = 0.005 mg/l	
Sulfide chronic = 0.002 mg/l	
Boron chronic = 0.75 mg/l	
Nitrite = 0.05 mg/l	
Nitrate = 10 mg/l	
Chloride chronic = 250 mg/l	
Sulfate chronic = 250 mg/l	
<i>Metals</i>	
Total Recoverable Arsenic acute = 50 ug/l	
Dissolved Cadmium acute for trout and Dissolved Cadmium chronic = TVS	
Total Recoverable Trivalent Chromium acute = 50 ug/l	
Dissolved Hexavalent Chromium acute and chronic = TVS	
Dissolved Copper acute and chronic = TVS	
Dissolved Iron chronic = 300 ug/l	
Total Recoverable Iron chronic = 1000 ug/l	
Dissolved Lead acute and chronic = TVS	
Dissolved Manganese chronic = 50 ug/l	
Total Mercury chronic = 0.01 ug/l	
Dissolved Nickel acute and chronic = TVS	
Dissolved Selenium acute and chronic = TVS	
Dissolved Silver acute and Dissolved Silver chronic for trout = TVS	
Dissolved Zinc acute and chronic = TVS	

Standards for metals are generally shown in the regulations as Table Value Standards (TVS), and these often must be derived from equations that depend on the receiving stream hardness or species

Blue Creek Ranch WWTP Preliminary Effluent Limits

PEL-Garfield County

of fish present. The Classification and Numeric Standards documents for each basin include a specification for appropriate hardness values to be used. Specifically, the regulations state that:

The hardness values used in calculating the appropriate metal standard should be based on the lower 95% confidence limit of the mean hardness value at the periodic low flow criteria as determined from a regression analysis of site-specific data. Where insufficient site-specific data exists to define the mean hardness value at the periodic low flow criteria, representative regional data shall be used to perform the regression analysis. Where a regression analysis is not appropriate, a site-specific method should be used.

Hardness data for the Roaring Fork River near the point of discharge of the proposed Blue Creek Ranch WWTP were insufficient to conduct a regression analysis based on the low flow. In the absence of a regression analysis, the WQCD's alternative approach to calculating hardness was used, which involves computing a mean hardness.

The mean hardness was computed to be 199 mg/l as CaCO₃ based on sampling conducted at Riverwatch sampling location 72 (Roaring Fork River at 7-11 Bridge) located approximately 7 miles upstream of the proposed Blue Creek Ranch WWTP. This mean hardness from the Roaring Fork River and the formulas contained in the TVS were used to calculate the in-stream water quality standards for metals as shown in Table 3.

Ambient Water Quality

The WQCD evaluates ambient water quality based on a variety of statistical methods as prescribed in Section 31.8(2)(a)(i) and 31.8(2)(b)(i)(B) of the *Colorado Department of Public Health and Environment Water Quality Control Commission Regulation No. 31*. Ambient water quality is evaluated as part of this assessment to determine assimilative capacities.

To conduct an assessment of the ambient water quality upstream of the Blue Creek Ranch WWTP, data were gathered from two sources. Data from the Riverwatch sampling location 72, located approximately seven miles upstream of the proposed Blue Creek Ranch WWTP, were used to determine ambient background concentrations for pH, temperature, dissolved oxygen, and hardness. Data were available for a period of record from October 1995 through February 2000. Data gathered at the WQCD sampling location 000144/12708 (Roaring Fork River below Aspen), located approximately twenty-five miles upstream of the proposed Blue Creek Ranch WWTP, provided background data on fecal coliform, ammonia, and metals. This WQCD sampling location was designated as sampling location 000144 until 1997, and later renumbered as WQCD sampling location 12708. These data were available for a period of record from October 1996 through April 2000. These data, which represent upstream ambient water quality, are summarized in Table 4.

III. Water Quantity

The Colorado Regulations specify the use of low flow conditions when establishing water quality based effluent limitations, specifically the acute and chronic low flows. The acute low flow, referred

Blue Creek Ranch WWTP Preliminary Effluent Limits

PEL-Garfield County

to as 1E3, represents the one-day low flow recurring in a three-year interval. The chronic low flow, 30E3, represents the 30-day average low flow recurring in a three-year interval.

Table 3			
Site-Specific Water Quality Standards for the Proposed Blue Creek Ranch WWTP			
Based on the Table Value Standards Contained in the Colorado Department of Public Health and Environment Water Quality Control Commission <i>Regulation 33</i>			
Calculated Using the Following Value for Hardness as CaCO ₃ :			199 mg/l
<i>Parameter</i>	<i>In-Stream Water Quality Standard</i>		<i>Formula Used</i>
Cadmium, Dissolved	Trout	8.5 ug/l	$e^{(1.128(\ln(\text{hardness}))-3.828)}$
	Chronic	1.9 ug/l	$e^{(0.7852(\ln(\text{hardness}))-3.490)}$
Hexavalent Chromium, Dissolved	Acute	16 ug/l	Numeric standards provided, formula not applicable
	Chronic	11 ug/l	Numeric standards provided, formula not applicable
Copper, Dissolved	Acute	34 ug/l	$e^{(0.9422(\ln(\text{hardness}))-1.4634)}$
	Chronic	21 ug/l	$e^{(0.8545(\ln(\text{hardness}))-1.465)}$
Lead, Dissolved	Acute	291 ug/l	$e^{(1.6148(\ln(\text{hardness}))-2.8736)}$
	Chronic	10 ug/l	$e^{(1.417(\ln(\text{hardness}))-5.167)}$
Nickel, Dissolved	Acute	1561 ug/l	$e^{(0.76(\ln(\text{hardness}))+3.33)}$
	Chronic	161 ug/l	$e^{(0.76(\ln(\text{hardness}))+1.06)}$
Selenium, Dissolved	Acute	20 ug/l	Numeric standards provided, formula not applicable
	Chronic	5.0 ug/l	Numeric standards provided, formula not applicable
Silver, Dissolved	Acute	6.6 ug/l	$e^{(1.72(\ln(\text{hardness}))-7.21)}$
	Trout	0.25 ug/l	$e^{(1.72(\ln(\text{hardness}))-10.51)}$
Zinc, Dissolved	Acute	210 ug/l	$e^{(0.8473(\ln(\text{hardness}))+0.8604)}$
	Chronic	190 ug/l	$e^{(0.8473(\ln(\text{hardness}))+0.7614)}$

Low Flow Analysis

To determine the low flows available to the proposed Blue Creek Ranch WWTP, a flow gage measurement immediately upstream of the proposed facility should be used. There are, however, no gage stations within 15 miles upstream or downstream of the proposed facility.

Low flows were therefore determined using a comprehensive analysis of the flow balance of the Roaring Fork River performed by the WQCD in 1998. As part of this analysis, the WQCD obtained Roaring Fork River daily flow data from several USGS gage stations and then performed a flow balance throughout the basin to determine low flows at multiple discharge points and tributary

Blue Creek Ranch WWTP Preliminary Effluent Limits

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confluences. Based on this analysis, the estimated low flows for the proposed Blue Creek Ranch WWTP are presented in Table 5.

Table 4
Ambient Water Quality for the Proposed Blue Creek Ranch WWTP

Parameter	Number of Samples	15th Percentile	50th Percentile	85th Percentile	Mean	Chronic Stream Standard	Notes
Tcmp (°C)	44	1.9	6	12	6.4	20	1
DO (mg/l)	36	8.5	10	12	10	7	1
pH (su)	36	8.3	8.6	9	8.6	6.5-9	1
Focal Coliform (#/100 ml)	18	1	1	3	2	200	2
Hardness (mg/l CaCO ₃)	45	139	202	246	199	NA	1
As, Dis (ug/l)	25	0	0	0	0.080	NA	3
Cd, Dis (ug/l)	33	0	0	0	0	1.9	2
Cu, Dis (ug/l)	33	0	0	0	0.052	21	3
Fc, Dis (ug/l)	6	14	15	29	22	300	
Fc, Trcc (ug/l)	33	32	46	142	139	1000	3
Pb, Dis (ug/l)	33	0	0	0	0.097	10	3
Mn, Dis (ug/l)	33	0	0	0.48	0.63	50	3
Hg, Tot (ug/l)	19	ND	ND	ND	ND	0.01	4
Se, Dis (ug/l)	27	0	0	0	0.29	5	3
Ag, Dis (ug/l)	28	ND	ND	ND	ND	0.25	4
Zn, Dis (ug/l)	33	0	0	21	10	190	3
B, Dis (mg/l)	9	0	0	0	0	250	3
Sulfate (mg/l)	33	44	93	130	92	250	3
P, Tot (mg/l)	14	0.030	0.04	0.061	0.048	NA	
Nitrate + Nitrite (mg/l)	33	0	0	0.25	0.11	NA	3
TKN (mg/l)	8	0	0	0	0	NA	3
NH ₃ , Tot (mg/l)	33	0	0	0	0.00091	NA	3
NH ₃ , Unionized (mg/l)	28	0.003	0.006	0.013	0.0096	0.02	
TSS (mg/l)	33	0	0	17	5.8	NA	3

Note 1: Data were taken from Riverwatch sampling location 72 (7-11 Bridge in Basalt) located approximately 7 miles upstream of the proposed Blue Creek Ranch WWTP. This data covers the period of record of 10/95 through 2/00.

Note 2: The calculated mean is the geometric mean and the stream standard is in units of #/100 ml. Note that for summarization purposes, the value of one was used where there was no detectable amount because the geometric mean of one is equal to zero.

Note 3: When sample results were non-detect, the value of zero was used in accordance with the CO WQCD's standard approach for summarization and averaging purposes.

Note 4: The noted parameters were found at less than detectable levels. The detection levels, however, were greater than the in-stream standards. In accordance with WQCD procedures, ambient water quality is not determined using non-detect data when detection levels are greater than the in-stream standards.

Blue Creek Ranch WWTP Preliminary Effluent Limits

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In the months of January, June, July, and October, the acute low flow exceeded the chronic low flow. In accordance with WQCD standard procedures, the acute low flow was set equal to the chronic low flow for these months.

<i>Low Flow (cfs)</i>	<i>Annual</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
1E3 Acute	159	239	201	210	189	159	365	333	282	235	290	284	265
30E3 Chronic	188	239	239	239	227	188	365	333	296	307	290	301	265

IV. Technical Analysis

Low flows and in-stream background data evaluated in sections II and III are ultimately used to determine the assimilative capacity of the Roaring Fork River near the proposed Blue Creek Ranch WWTP for pollutants of concern. For all parameters except ammonia, it is the WQCD's approach to conduct a technical analysis of stream assimilation capacity using the lowest of the monthly low flows (referred to as the annual low flow) as calculated in the low flow analysis. For ammonia, it is the standard procedure of the WQCD to determine assimilative capacities for each month using the monthly low flows calculated in the low flow analysis, as the regulations allow the use of seasonal flows when establishing assimilative capacities.

The WQCD's standard analysis consists of steady-state, mass-balance calculations for most pollutants and modeling for pollutants such as ammonia. The mass-balance equation is used by the WQCD to calculate the maximum allowable concentration of pollutants in the effluent, and accounts for the upstream concentration of a pollutant, critical low flow (minimal dilution), effluent flow and the water quality standard. The mass-balance equation is expressed as:

$$M_2 = \frac{M_3 Q_3 - M_1 Q_1}{Q_2}$$

Q_1 = Upstream low flow (1E3 or 30E3)

Q_2 = Average daily effluent flow (design capacity)

Q_3 = Downstream flow ($Q_1 + Q_2$)

M_1 = In-stream background pollutant concentrations

M_2 = Calculated maximum allowable effluent pollutant concentration

M_3 = Maximum allowable in-stream pollutant concentration (water quality standards)

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For non-conservative parameters and ammonia, the mass-balance equation is not as applicable and thus other approaches are considered where appropriate. Note that conservative pollutants are pollutants that are modeled as if mass is conserved and there is no degradation, whereas non-conservative pollutants degrade and sometimes are created within a receiving stream depending on stream conditions. A more detailed discussion of the technical analysis for these parameters is provided in the pages that follow.

Pollutants of Concern

The following pollutants were identified by the WQCD as pollutants of concern for this facility:

- BOD₅
- TSS
- Percent removal
- Oil and Grease
- pH
- DO
- Fecal Coliform
- Total Residual Chlorine
- Ammonia.

There are no in-stream water quality standards for BOD₅, TSS, percent removal, and oil and grease for the Roaring Fork River. Thus, assimilative capacities were not determined for these parameters in this section and an antidegradation review for these parameters was not conducted in Section V. However, the evaluation of applicable limitations for these pollutants can be found in Section VI, Regulatory Analysis.

During assessment of the facility, nearby facilities, and receiving stream water quality, no additional parameters were identified as pollutants of concern. It should be noted that cyanide and metals are not evaluated as part of PELs development because it is the WQCD's approach to ensure control of cyanide and metals through a pretreatment program, if necessary, versus through wastewater treatment.

Blue Creek Ranch WWTP: The proposed Blue Creek Ranch WWTP will be located near the town of Mulford in the Southwestern-most corner of Garfield County, specifically, the NW quarter of the SE quarter of Section 31, Township 7 South, Range 87 West of the 6th P.M. The proposed design capacity of the facility is 0.02 MGD (0.031 cfs). The proposed wastewater treatment is a mechanical wastewater treatment process. The technical analyses that follow include assessments of the assimilative capacity based on this proposed design capacity.

Nearby Sources

An assessment of nearby facilities based on EPA's Permit Compliance System (PCS) database found 51 dischargers in the Garfield County area. Because of its proximity to Eagle and Pitkin Counties (within five miles upstream) facilities in these counties were assessed also. Several of the facilities conducted construction related operations and thus had no pollutants of concern in common with

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proposed Blue Creek Ranch WWTP. Other facilities discharged to different watersheds or were located more than twenty miles from the proposed Blue Creek Ranch WWTP and thus were not considered to be of relevance to this analysis.

The nearest dischargers were:

- The Mid-Valley Metropolitan District WWTP (COG584007), located 4 miles upstream near the town of El Jebel, discharges directly into the Roaring Fork River. A few miles farther upstream the Basalt Sanitation District WWTP (CO0021491), which services the town of Basalt, also discharges to the Roaring Fork River.
- The Ranch at Roaring Forks (COG584051) discharges to the Roaring Fork River approximately two miles downstream and the Town of Carbondale WWTP (COG584050) discharges four miles downstream of the proposed Blue Creek Ranch WWTP.

The ambient water quality background concentrations used in the mass-balance equation account for pollutants of concern contributed by upstream sources, and thus it was not necessary to model upstream dischargers together with the Blue Creek Ranch WWTP when determining available assimilative capacities in the Roaring Fork River. Because of the significant dilution available relative to the size of the dischargers of concern, downstream dischargers were not found to affect the assimilative capacity calculations for the Roaring Fork River near the proposed Blue Creek Ranch WWTP.

Based on available information, there is no indication that non-point sources were a significant source of pollutants of concern. Thus, non-point sources were not considered in this assessment.

BOD₅, TSS, and Percent Removal: There are no in-stream water quality standards for BOD₅, TSS, and percent removal for the Roaring Fork River. Thus, assimilative capacities for these parameters were not calculated.

Oil and Grease: There are no in-stream water quality standards for total oil and grease for the Roaring Fork River. Thus, assimilative capacities for total oil and grease were not calculated.

pH: The pH of a stream measures the intensity of the acidity or alkalinity of the stream. When pH falls outside of the neutral range, it can be harmful to aquatic life. To determine assimilative capacities of a stream for pH, the buffering capacity of the receiving stream and its interaction with the discharge contributions would need to be assessed in a complex evaluation.

An evaluation of pH data available for the Roaring Fork River near the proposed Blue Creek Ranch WWTP found that the 15th percentile value was well above the minimum in-stream water quality standard and the 85th percentile value was well below the maximum in-stream water quality standard. Because only limited data are available and because ambient water quality data indicate that no further controls are needed to meet in-stream pH standards, a complex evaluation of the assimilative capacity for pH is not warranted for this facility.

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DO: The availability of dissolved oxygen in receiving streams is critical for aquatic life. Decomposition of organic matter and nitrification within receiving streams are generally the causes of depletion of DO in receiving waters.

For a non-conservative parameter like DO, a simple mass balance cannot be used to determine assimilative capacity. Instead, DO background, stream flow, 5-day biochemical oxygen demand and ammonia loading, stream dimensions, temperature, and estimates of effluent DO may be incorporated into models such as the Streeter-Phelps DO model or STREAMDO to simulate the impact of the proposed Blue Creek Ranch WWTP discharge.

An evaluation of DO data available for the Roaring Fork River near the proposed Blue Creek Ranch WWTP found that the 15th percentile value was well above the minimum in-stream water quality standard. Because only limited data are available and because ambient water quality data indicate that no further controls are needed to meet in-stream standards for DO, modeling was not conducted as part of this evaluation and no further discussion of DO is provided.

Chlorine: The mass-balance equation was used to determine the assimilative capacity for chlorine. There are no point sources discharging total residual chlorine within one mile of the proposed Blue Creek Ranch WWTP. Because chlorine is rapidly oxidized, in-stream levels of residual chlorine are detected only for a short distance below a source. Ambient chlorine was therefore assumed to be zero.

Using the mass-balance equation provided in the beginning of Section IV, the acute and chronic low flows set out in Section III, the chlorine background concentration of zero as discussed above, and the in-stream standards for chlorine shown in Section II, assimilative capacities for chlorine were calculated. The data used and the resulting calculations of the allowable discharge concentration, M_2 , are also set forth below.

Parameter	Q_1 (cfs)	Q_2 (cfs)	Q_3 (cfs)	M_1 (ug/l)	M_3 (ug/l)	M_2 (ug/l)
Acute Chlorine	159	0.031	159.031	0	19	97,471
Chronic Chlorine	188	0.031	188.031	0	11	66,721

Fecal Coliform: There are no point sources discharging fecal coliform within one mile of the proposed Blue Creek Ranch WWTP. Thus fecal coliform assimilative capacities were evaluated separately.

It is the standard approach of the WQCD to perform a mass-balance check to determine if fecal coliform standards are exceeded. And, as is standard WQCD procedure, the checks are only conducted on the chronic low flows as set out in Section III. Using the mass-balance equation provided in the beginning of Section IV, the background concentration for fecal coliform contained in Section II, and the in-stream standards for fecal coliform shown in Section II, checks for fecal

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coliform were conducted. The data used and the resulting calculations of the allowable discharge concentration, M_2 , are also set forth below.

Parameter	Q_1 (cfs)	Q_2 (cfs)	Q_3 (cfs)	M_1 (#/100 ml)	M_3 (#/100 ml)	M_2 (#/100 ml)
Fecal Coliform	188	0.031	188.031	2	200	1,200,974

Ammonia: Ammonia is present in the aqueous environment in both ionized and un-ionized forms. It is the un-ionized form which is toxic and which is addressed by water quality standards. The proportion of total ammonia present in un-ionized form in the receiving stream is a function of the upstream and effluent ammonia concentrations, and the pH and temperature of the receiving stream and of the effluent, combined.

The Colorado Ammonia Model (CAM) is a software program designed to project the downstream effects of ammonia and the ammonia assimilative capacities available to each discharger based on upstream water quality and effluent discharges. To develop data for the CAM, an in-stream water quality study must be conducted of the upstream receiving water conditions, particularly the pH and corresponding temperature, over a period of at least one year.

There were no data in the Roaring Fork River near the proposed Blue Creek Ranch WWTP that could be used as adequate input data for the CAM. Therefore, the WQCD standard procedure is to rely on default values for the allowable chronic concentrations of in-stream total ammonia, which are provided in the *Colorado Total Maximum Daily Load and Wasteload Allocation Guidance* and the *CDPS Summary of Rationale General Permit for Domestic Wastewater Treatment Facilities that Discharge to Receiving Waters with a Chronic Low Flow: Design Flow Ratio of 100:1 or Greater*. Note that acute values are not provided in these sources and thus are not evaluated as part of this assessment.

Using the mass-balance equation provided in the beginning of Section IV, the acute and chronic low flows set out in Section III, the mean ammonia background concentration shown in Section II, and the in-stream standards found in the *Colorado Total Maximum Daily Load and Wasteload Allocation Guidance* and the *CDPS Summary of Rationale General Permit for Domestic Wastewater Treatment Facilities that Discharge to Receiving Waters with a Chronic Low Flow: Design Flow Ratio of 100:1 or Greater* for M_3 , assimilative capacities for chronic total ammonia were calculated. The data used and the resulting calculations of the allowable discharge concentration, M_2 , are contained in Table 6.

V. Antidegradation Review

As set out in *The Basic Standards and Methodologies of Surface Water*, Section 31.8(2)(b), an antidegradation analysis is required except in cases where the receiving water is designated as "Use Protected." Note that "Use Protected" waters are waters "that the Commission has determined do

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not warrant the special protection provided by the outstanding waters designation or the antidegradation review process" as set out in Section 31.8(2)(b). The antidegradation section of the regulation became effective in December 2000, and therefore antidegradation considerations are applicable to the proposed Blue Creek Ranch WWTP permit issuance.

According to the Classification and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12), stream segment COUCRF03 is Undesignated. Thus, an antidegradation review is required for this segment if new or increased impacts are found to occur.

Table 6
Monthly Assimilative Capacities for Ammonia on the Roaring Fork River
at the Proposed Blue Creek Ranch WWTP

<i>Parameter</i>	<i>Q₁ (cfs)</i>	<i>Q₂ (cfs)</i>	<i>Q₃ (cfs)</i>	<i>M₁</i>	<i>M₃</i>	<i>M₂</i>
NH ₃ , Tot (mg/l) Jan	239	0.031	239.031	0.00091	0.70	5,390
NH ₃ , Tot (mg/l) Feb	239	0.031	239.031	0.00091	0.60	4,619
NH ₃ , Tot (mg/l) Mar	239	0.031	239.031	0.00091	0.40	3,077
NH ₃ , Tot (mg/l) Apr	227	0.031	227.031	0.00091	0.40	2,923
NH ₃ , Tot (mg/l) May	188	0.031	188.031	0.00091	0.30	1,814
NH ₃ , Tot (mg/l) Jun	365	0.031	365.031	0.00091	0.30	3,522
NH ₃ , Tot (mg/l) Jul	333	0.031	333.031	0.00091	0.30	3,213
NH ₃ , Tot (mg/l) Aug	296	0.031	296.031	0.00091	0.30	2,856
NH ₃ , Tot (mg/l) Sep	307	0.031	307.031	0.00091	0.30	2,962
NH ₃ , Tot (mg/l) Oct	290	0.031	290.031	0.00091	0.30	2,798
NH ₃ , Tot (mg/l) Nov	301	0.031	301.031	0.00091	0.30	2,904
NH ₃ , Tot (mg/l) Dec	265	0.031	265.031	0.00091	0.50	4,267

The ratio of the low flow of the Roaring Fork River to the design flow of the proposed Blue Creek Ranch WWTP is 6065:1. Section 31.8 (3)(c) specifies that the discharge of pollutants should not be considered to result in significant degradation of the reviewable waters if the ratio of the low flow of the receiving water to the facility flow is greater than 100:1. Thus, condition 31.8(3)(c) of the regulations is met and no further antidegradation evaluation is necessary.

VI. Regulatory Analysis

Regulation 62, the *Regulations for Effluent Limitations*, includes effluent limitations that apply to all discharges of wastewater to State waters, with the exception of storm water and agricultural return flows. These regulations are applicable to the proposed Blue Creek Ranch WWTP discharge. Table 7 contains a summary of these limitations.

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In addition to these regulations, the State has developed the *Procedure for Selection of Fecal Coliform Limitations Permit Conditions* that specifies a 30-day average limit of 6,000 colonies per 100 ml and a 7-day average limit of 12,000 colonies per 100 ml when the ratio of the receiving stream flow to design flow is greater than ten to one.

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Table 7
Specific Limitations for the Discharge of Wastes

<i>Parameter</i>	<i>7-Day Average</i>	<i>30-Day Average</i>	<i>Instantaneous Maximum</i>
BOD ₅	45 mg/l	30 mg/l	NA
TSS, mechanical plant	45 mg/l	30 mg/l	NA
TSS, aerated lagoon	110 mg/l	75 mg/l	NA
TSS, non-acrated lagoon	160 mg/l	105 mg/l	NA
BOD ₅ Percent Removal		85%	
TSS Percent Removal		85%	
Total Residual Chlorine			0.5 mg/l
pH			6.0-9.0 su range
Oil and Grease			10 mg/l

Note that the TSS limitations shown above vary based on the type of wastewater treatment processes used at the facility. The *Regulations for Effluent Limitations* waive the 85 percent removal requirements for TSS where waste stabilization ponds, both acrated and non-acrated, are used as the principal process for treating domestic wastes.

VII. Preliminary Effluent Limits

The regulations require the use of the most stringent effluent limit for permit limitations. Thus, the PELs reflected in Table 8 include the most stringent of the following:

- Water quality-based effluent limits as discussed in the technical analysis contained in Section IV
- ADBELs as discussed in the antidegradation review provided in Section V
- Effluent limits prescribed by the regulations based on the regulatory analysis provided in Section VI.

Table 8
Proposed Blue Creek Ranch WWTP
Preliminary Effluent Limits for Discharge to the Roaring Fork River

BOD ₅ (mg/l)	45 (7-day average), 30 (30-day average)
BOD ₅ (percent removal)	85 (30-day average)
TSS (mg/l)	45 (7-day average), 30 (30-day average)
TSS (percent removal)	85 (30-day average)
Oil and Grease (mg/l)	10 (maximum)
pH (s.u.)	6.5-9.0 (minimum-maximum)
Fecal Coliform (organisms/100 ml)	12,000 (7-day average), 6,000 (30-day average)
Total Residual Chlorine (mg/l)	0.5 (maximum)

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The *Procedure for Selection of Fecal Coliform Limitations Permit Conditions* specifies that the 7-day average limit must be calculated as two times the 30-day average limit.

Note that limitations for ammonia were not necessary for this facility because the assimilative capacity of the receiving water, as discussed in Section IV, is large enough to establish total ammonia effluent concentrations for all months at 30 mg/l. Because treated sanitary sewage effluent is not expected to have a total ammonia concentration greater than 30 mg/l, no additional allocations were determined as per WQCD procedure.

VIII. References

Colorado Total Maximum Daily Load and Wasteload Allocation Guidance, CDPHE, WQCD, November 1991.

Classification and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12), Regulation No. 33, CDPHE, WQCC, November 30, 1999.

The Basic Standards and Methodologies for Surface Water, Regulation 31, CDPHE, WQCC, November 8, 2000.

Procedure for Selection of Fecal Coliform Limitations Permit Conditions, CDPHE, WQCD, 1976.

Regulations for Effluent Limitations, Regulation 62, CDPHE, WQCC, November 9, 1998.

CDPS Summary of Rationale General Permit for Domestic Wastewater Treatment Facilities that Discharge to Receiving Waters with a Chronic Low Flow: Design Flow Ratio of 100:1 or Greater, CDPS Permit COG-584000, Statewide, CDPHE, September 14, 1994.

DRAFTSEWER CONNECTION AGREEMENT

THIS SEWER CONNECTION AGREEMENT ("Agreement") is made and entered into as of the ___ day of _____, 2001, by and between BLUE CREEK LAND HOLDINGS, LLC, a Colorado limited liability company ("Blue Creek"), and ASPEN EQUESTRIAN ESTATES, LLC, a Colorado limited liability company ("AEE"), and ASPEN EQUESTRIAN ESTATES HOMEOWNERS ASSOCIATION ("AEEHOA");

RECITALS:

A. Blue Creek is the owner of that certain real property located in Garfield County, Colorado commonly known as Blue Creek Ranch, which property is described on Exhibit "A" attached hereto and incorporated herein by this reference ("Blue Creek Ranch"); and

B. AEE is the developer of that certain real property located in Garfield County, Colorado known as Aspen Equestrian Estates, which property is described on Exhibit "B" attached hereto and incorporated herein by this reference ("AEE Property"); and

C. Owned by AEEHOA and constructed upon the AEE Property is a sewage collection system ("AEE Sewage Collection System") which collects wastewater and sewage from the individual lots and structures located on the AEE Property and conveys such to the Ranch at Roaring Fork ("Ranch") for treatment and disposal at the Ranch's wastewater treatment plant ("Ranch Wastewater Plant"); and

D. In the conveyance of the AEE Sewage Collection System from AEE to AEEHOA, AEE has reserved unto itself the right to make the AEE Sewage Collection System available to third parties and to receive compensation and cost recovery for the original construction thereof, in accordance with such documents of transfer; and

E. Blue Creek is developing Blue Creek Ranch and will construct a wastewater and sewage collection system on its property; and

F. Blue Creek desires to connect its collection system to AEE's main collection trunk line for purposes of conveying its wastewater through the AEE Property and to the Ranch, in the event the Ranch offers sewer treatment service to Blue Creek; and

G. AEE and AEEHOA are willing to allow such connection and wastewater conveyance and willing to grant such associated rights to Blue Creek, pursuant to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual agreements made herein, Blue Creek, AEEHOA and AEE agree as follows:

1. Grant of Option for Sewer Connection. Subject to the terms and conditions of this Agreement, AEE hereby grants to Blue Creek an option to connect Blue Creek's sewage

collection system to the AEE main sewer collection line and related infrastructure presently constructed upon AEE as shown on the map attached hereto as Exhibit C and incorporated herein by reference ("AEE Main Collection Line"), at the point of connection described further herein, for purposes of conveying wastewater flows from Blue Creek Ranch through the AEE Property and on to the Ranch for final treatment at the Ranch Wastewater Plant ("Option for Sewer Connection"). Blue Creek shall exercise the Option for Sewer Connection by notice in writing to AEE on or before 5:00 p.m. on December 31, 2003 (the "Option Deadline"). Such notice shall provide AEE with the estimated time for the construction by Blue Creek of the facilities necessary to connect Blue Creek Ranch to AEE's Main Collection Line and an estimated date when such actual sewer flow conveyance will be required. In the event Blue Creek does not exercise the Option by the Option Deadline or otherwise provides notice in writing to AEE of termination of this Agreement, this Agreement shall automatically terminate and be of no further force or effect and the parties shall have no further obligation hereunder, except AEE shall refund the Option Fee as further provided herein.

2. Option Fees and Review Fees. As an express condition precedent and in consideration for granting such Option for Sewer Connection, Blue Creek shall pay to AEE the sum of twenty-five thousand dollars (\$25,000.00) or such other consideration, goods or services valued at \$25,000 as mutually agreed upon by the parties in a separate written agreement ("Option Fee"). As of the date hereof, Blue Creek has paid the amount of five thousand dollars (\$5000.00) to AEE to review and enter into the negotiations for this Agreement, payment of which is acknowledged by AEE and is credited towards the \$25,000 Option Fee. Such payment of the balance of the Option Fee of twenty thousand dollars (\$20,000) shall be due upon full execution of this Agreement, unless however, payment of the balance of the Option Fee is in the form of Blue Creek providing goods and/or services to AEE in the manner described above, then in such case, the parties shall mutually agree upon the timing of performance in this respect. The Option Fee shall be refundable if this Agreement is terminated pursuant to the terms contained herein. In the event the Option for Sewer Connection is exercised, the Option Fee shall be credited against the Sewer Connection Fee described in Paragraph 3 below. In addition to the Option Fee, Blue Creek agrees to pay all of AEE's reasonable attorneys' fees incurred in the negotiation and review of this Agreement, payment of which has been made by Blue Creek to AEE as of the date hereof and is hereby acknowledged by AEE. The payment of attorney fees is non-refundable.

3. Sewer Connection Fee. In consideration for allowing connection and conveyance of sewer flows from Blue Creek Ranch through AEE's Main Collection Line in accordance with this Agreement, Blue Creek shall pay the sum of two hundred thousand dollars (\$200,000.00), which payment shall be due and payable to AEE at the time of execution of the Blue Creek Ranch final plat (the "Sewer Connection Fee"). Subsequent to the payment of the Sewer Connection Fee, Blue Creek shall be entitled to make physical connection to the AEE Main Collection Line and convey wastewater through the AEE Property to the Ranch as set forth herein.

4. Ranch Wastewater Treatment Contingency. The right of Blue Creek to commence construction of the Connecting Main is expressly contingent upon the necessary approval being obtained from the Ranch to permit and accept wastewater flows from Blue Creek Ranch for treatment and disposal at the Ranch Wastewater Plant. Such Ranch approval shall be evidenced

by a fully executed Sewer Service Agreement between Blue Creek and the Ranch. If the Ranch declines to offer wastewater service to Blue Creek, or if wastewater service at the Ranch Wastewater Plant is not extended for any other reason, as evidenced by a written final determination from the Ranch or the Colorado Water Quality Control Division, then this Agreement shall automatically terminate and be of no further force or effect and the parties shall have no further obligation hereunder, except that AEE shall refund the Option Fee to Blue Creek to the extent this fee has been paid and/or performed by Blue Creek.

5. Master Sewer Association. It is contemplated that Blue Creek and AEE shall form a master sewer association that shall hold title and easement rights to, and shall govern, control, maintain and operate, the sewer collection and transmission systems, as well as, all connecting lines, lift stations or other sewer facilities, located on both Blue Creek Ranch, the AEE Property or other adjacent properties (the "AEE/BLUE Sewer Association"). The AEE/BLUE Sewer Association shall be consolidated at the outset or as soon as feasible upon execution of this Agreement, with the AEE/BLUE Water Association, to the extent such is or is to be formed as described in a separate Water Supply and Connection Agreement between the parties, to form a single entity called the AEE/BLUE Water & Sewer Association. The Association shall be responsible for adopting rules and regulations governing sewer usage within both developments, billing all sewer users within both developments an equal charge for sewer usage and reserve for replacement costs, and operating, maintaining, improving, repairing, replacing and taking such other necessary and prudent actions with respect to the sewer pipelines and all sewer transmission, lift and distribution facilities within both developments ("Sewer System Infrastructure"). It is agreed and acknowledged that the Board of Directors for such master association shall consist of two members from the homeowners association for Blue Creek Ranch and two members from the homeowners association for the AEE Property. In the event the AEE/BLUE Water & Sewer Association is formed, there shall only be one Board of Directors comprised of four members as described above. The Board of Directors shall have such powers including, but not limited to, deciding and acting upon all Sewer System Infrastructure matters. Such "infrastructure matters" include, but are not limited to, proposals for sewer system infrastructure or facilities repair, replacement, maintenance, construction, extension, cleaning, operation, monitoring and management. All Board of Director decisions, including, but not limited to, all "infrastructure matters," management, control and operation decisions, shall be made by not less than a 75% vote of the Board of Directors. If a 75% vote cannot be reached on an "infrastructure matter" submitted for a vote, then the matter or question shall be submitted to a neutral, qualified, third-party engineer or hydrologist for an independent determination. The engineer or hydrologist recommendation shall be binding and shall have the same effect as if action on the proposed matter received a 75% vote of the Board of Directors. All homeowners within Blue Creek Ranch and the AEE Property shall be subject to and shall comply with any and all rules and regulations adopted by the AEE/BLUE Sewer (or Water & Sewer) Association. The parties agree to provide for compliance with such rules and regulations in the master declarations of covenants, conditions, and restrictions for their respective properties. The Association shall be formed jointly by the parties and articles of incorporation for the Association, or consolidation articles for a Water & Sewer Association as the case may be, shall be filed with the Secretary of State within ten (10) days from Blue Creek's exercise of the Option for Sewer Service. The Association shall thereafter obtain a property and liability

insurance policy to cover the sewer facilities and its operations on both AEE and Blue Creek Ranch and shall name AEE and Blue Creek as a co-insured on such policy.

6. Installation of Blue Creek Sewage Facilities. Blue Creek shall be responsible, at its sole cost and expense, to design and construct a sewer collection system, including any and all sewer lines, pipes, pumps, valves, shut-off valves, meters, and other related facilities and improvements required to collect and transmit sewage and wastewater from the Blue Creek Ranch development ("Blue Creek Collection System"), and to design and construct a main collection sewer trunk line (the "Connecting Main") to transmit and convey wastewater from the Blue Creek Collection System to the AEE Main Collection Line. Such Collection System and Connecting Main shall be constructed in accordance and conformance with the requirements, standards and conditions of the Ranch, any Sewer Service Agreement entered into with the Ranch, the Ranch's Rules and Regulations and/or any committees or management organizations associated with Ranch wastewater service, including any provisions for shut-off and metering sewer flows and strength. Blue Creek shall be responsible for connecting the Blue Creek Collection System via the Connecting Main to the AEE Main Collection Line at that point located near the entrance to the AEE Property, as shown more fully on the Plans and Specifications and graphically on Exhibit D attached hereto and incorporated herein by reference (the "Point of Connection"). AEE and/or the Association shall have the right to inspect the construction and connection of the Connecting Main to the Point of Connection to insure that such sewer line and connection have been constructed in accordance with acceptable engineering standards and the requirements of the Ranch, provided however, such inspection shall not be deemed certification or acquiescence that such standards and requirements have been met.

7. Utilization of Connecting Main from AEE to the Ranch. Prior to commencement of construction of the Connecting Main, Blue Creek shall comply with and meet any and all applicable requirements of the Sewer Connecting Main Agreement, dated September 21, 1999, between the Ranch, AEE and St. Finnbar and recorded at Reception No. 553171 of Garfield County Records (the "Sewer Connecting Main Agreement"), as well as, comply with any applicable provisions of the Sewer Service Agreement, dated September 22, 1999, between the Ranch and AEE and recorded at Reception No. 553170 of Garfield County Records. Such obligations or requirements include, but are not limited to, (1) securing all necessary easements and rights to connect to and convey sewage through the "Connecting Main" constructed along the Lot 12/13 property boundary at the Ranch at Roaring Fork, Phase V (the "AEE/St Finnbar Connecting Main"), in accordance with the terms and conditions of the Sewer Connecting Main Agreement or other agreements which have been or may be necessary to be entered into; and (2) complying with the "Future Cost Recovery and Capacity" provision of the Sewer Connecting Main Agreement, including payment of the "developer rebate" described in such agreement. AEE shall cooperate in granting the necessary rights and approvals to Blue Creek to share in the AEE/St.Finnbar Connecting Main upon compliance with the Sewer Connecting Main Agreement, at no additional consideration from Blue Creek, except to pay AEE's share of the "developer rebate." In the event Blue Creek is unable to obtain and secure the necessary easement rights, authorizations and agreements from the other third parties to utilize the AEE/St.Finnbar Connecting Main and facilities identified in the above mentioned agreements, then this Agreement shall automatically terminate and be of no further force or effect and the parties shall have no further obligation hereunder, except that AEE shall refund the Option Fee to Blue Creek to the extent this fee has been paid and/or performed by Blue Creek.

8. Easement for Blue Creek. Upon the exercise of the Option for Sewer Connection, and so long as the above conditions precedent for commencement of construction of the Connecting Main have been met, AEE hereby grants to Blue Creek a temporary construction easement on, over and across that portion of the AEE Property between Blue Creek Ranch and the Point of Connection in order to allow Blue Creek to construct, install and connect the Connecting Main to the AEE Main Collection Line. Upon final construction and connection of the Blue Creek Collection System and Connecting Main, AEE shall grant to Blue Creek a perpetual non-exclusive easement ten (10) feet on either side of the center line of the Connecting Main as such is located on AEE's Property, as well as, the AEE Main Collection Line for purposes of conveying wastewater through the AEE Property to the Ranch and operating, maintaining, repairing, improving, and replacing said line or facilities (the "Easement"). A copy of the Easement is attached hereto as Exhibit E and incorporated herein by this reference. Upon the payment of the Sewer Connection Fee to AEE the parties agree to execute the Easement. The attorneys for Blue Creek Ranch or an escrow agent designated by both parties shall hold the Easement until the legal description for the Connecting Main on the AEE Property is prepared by Blue Creek. Once the Connecting Main has been installed and connected, Blue Creek shall have a legal description prepared for the Connecting Main installed on the AEE Property. The legal description shall be approved by both parties, which approval shall not be unreasonably withheld. It shall then be attached to the Easement and the Easement shall be recorded in the Garfield County real estate records. To the extent the Connecting Main is ever required to be relocated upon the AEE Property in order to continue the sewer service set forth herein, AEE and Blue Creek shall cooperate in good faith in the determination of the relocation of the Connecting Main to a location which does not adversely affect the present or then reasonably foreseeable development or redevelopment of the AEE Property, and in the preparation of an amendment of the legal description of the Easement to reflect the relocated facilities. Any such amended legal description to the Easement shall be recorded in the Garfield County real estate records.

9. Sewer Line Service to Blue Creek Ranch. Upon the completion of the Connecting Main and connection of the Connecting Main to the AEE Main Collection Line in accordance with the terms and condition contained herein, AEE agrees to allow sewer flows to be carried in the AEE Main Collection Line and transmitted through the AEE Property, subject to the terms and conditions set forth in this Agreement. Blue Creek shall only transmit and convey the sewer flows associated with 52 EQR's of water usage as shown on the Blue Creek Ranch Estimated Water Requirements Table attached hereto and incorporated herein as Exhibit E (the "Blue Creek Ranch Water Demand"), or the sewer flows permitted and approved for treatment by the Ranch, whichever is greater, so long as there is capacity available in the AEE Main Collection Line. For purposes hereof, the capacity of the 8" AEE Main Collection Line shall be allocated to Blue Creek and AEE in proportion to each development's EQR capacity (i.e., 52/117.6 to Blue Creek, 65.6/117.6 to AEE). Sewer line service by AEE hereunder shall be appurtenant to the Blue Creek Ranch and shall not be transferable by Blue Creek to any other development or property.

10. Conveyance of Blue Creek and AEE Sewer Facilities and Easements to Association. Upon the completion of the Blue Creek Collection System and connection of the Connecting Main to the AEE Main Collection Line, Blue Creek shall transfer and convey all easement rights associated therewith, including the Easement described in Paragraph 8 above, to the Association free and clear of all encumbrances. At the same time, AEE shall transfer and convey all

easement rights associated with the AEE Collection System and AEE Main Collection Line to the Association free and clear of all encumbrances. The parties shall also convey all easement rights they respectively hold in the AEE/Blue Creek Connecting Main and alignment as described in the Sewer Connecting Main Agreement. The Association shall thereafter be responsible for operating, maintaining, improving, repairing and replacing the Blue Creek and AEE Collection Systems, the Connecting Main, the AEE Main Collection Line and the AEE/St. Finnbar Connecting Main (collectively, the "AEE/Blue Creek Sewer Facilities").

11. Water Service Fees. Following completion of the connection of the Connecting Main to the AEE Main Collection Line, the Association shall charge sewer service fees to all AEE and Blue Creek Ranch lot owners. All lot owners within the AEE Property and Blue Creek Ranch shall be charged the same basic sewer service rate by the Association, which charges for sewer service shall be submitted directly by the Association to each lot owner within both developments. Unused or inactive EQRs owned by the parties prior to conveyance of lots within the respective developments shall be assessed a service fee of \$15.00 per month per EQR.

12. Use of Sewer Service. Utilization of sewer service by the individual homeowners shall be monitored by individual water meters installed on each residence and assuming that sewer flows equal 95% of such water delivery. Such individual meters shall be required by the parties hereto. Each lot owner within both developments shall thereafter be obligated to pay for the amount of sewer flows associated with each respective lot as recorded by its individual meter pursuant to the rates and regulations adopted by the Association. The Association shall determine the method and requirements for determining and charging for sewer flows from non-residential uses and structures. Each lot owner or sewer user within Blue Creek Ranch and the AEE Property shall enter into a sewer service contract with the Association which shall set forth specific terms and provisions related to sewer usage, payment obligations, and other related matters.

13. Operation, Maintenance and Repair. Upon installation of the Connecting Main, the Association shall thereafter be solely responsible for operating, maintaining, repairing, improving, and replacing the AEE/Blue Creek Sewer Facilities, and for collecting for all costs associated therewith. AEE and Blue Creek shall provide in the protective covenants of its respective homeowners' associations that such associations shall include as a cost of which they can place a lien on the lots of their respective members, the charges payable under this Agreement by an owner who is delinquent in the payments to the Association and shall upon request of the Association, foreclose such lien and collect such delinquent payments, together with interest thereon at the rate of eighteen percent (18 % per annum) and collect costs and attorney fees. Unless set forth otherwise in this Agreement, the costs associated with the obligations set forth above shall be assessed evenly to the parties hereto and/or the homeowners within such developments by the Association. The Association shall keep the AEE/Blue Creek Sewer Facilities and all related appurtenances, and all future sewer facilities, in good working order at all times and ensure that such Sewer Facilities are at all times capable of providing sewer service and conveyance.

14. Additional Water Users. The parties agree that nothing herein shall prevent AEE or Blue Creek, or the Association if formed, from making the main trunk lines of the AEE/Blue Creek Sewer Facilities available to other properties for sewer flow conveyance through the AEE

and/or Blue Creek properties, and from receiving compensation or cost recovery therefore provided however, Blue Creek shall solely receive the compensation for a third party's utilization of the Blue Creek Collection System and components thereof constructed upon Blue Creek Ranch, as well as, the Connecting Main; and AEE and Blue Creek shall share evenly in compensation for a third party's utilization of the shared sewer lines and facilities consisting of the AEE Main Collection Line and the AEE/St. Finnbar Connecting Main. The parties agree that together they shall engage competent engineering to determine if any such additional service through the sewer lines will adversely impact the ability of the parties to receive sewer service and carry sewer flows as provided herein. If such additional sewer user is to be considered, the parties agree that as a condition to offering such service, the third party must enter into an agreement with the parties similar in scope and nature as this Agreement.

15. No Interference. AEE and Blue Creek agree that neither of them shall undertake any action or, to the extent they are affirmatively obligated to prevent an action to occur or to allow any condition to exist, that interferes with uninterrupted sewer service to either of their properties.

16. Breach of Contract; Default. In the event of a breach of any of the terms and conditions of this Agreement, the non-breaching party shall give the party in default written notice of said breach and a thirty (30) day right to cure; provided, however, that if it is determined in either parties sole discretion that the cure of any breach by the other party is immediately necessary in order to protect the health, safety, and welfare of any of the water users, the 30-day cure period set forth above shall not apply. In the event the breaching party has not cured said default within the 30-day period, or begun the diligent undertaking of good faith efforts to cure the default, the non-breaching party may bring an action in the Garfield County District Court for damages, mandatory injunctive relief, and/or specific performance and shall be entitled to recover from the other party reasonable attorneys' fees and costs expended in connection with such action.

17. Assignment. Blue Creek shall have the right, without the consent of AEE, to assign all or a portion of its right, title and interest in the Option for Sewer Connection and this Agreement to any other party that is a successor in ownership to all or any portion of Blue Creek Ranch, and to any homeowners' association formed to govern all or any portion of Blue Creek Ranch, so long as any such assignee shall assume in writing Blue Creek's obligations hereunder and, to the extent that all of such obligations are assigned, Blue Creek is released from any responsibility for such obligations subsequent to the assignment thereof. AEE shall have the right, without the consent of Blue Creek, to assign all of its right, title and interest in this Agreement to any other party that is a successor in ownership to all or any portion of the sewer facilities, so long as any such assignee shall assume all of AEE's obligations hereunder and provide such assurances to Blue Creek in writing. AEE shall thereafter be released from any obligations hereunder that are subsequent to such assignment.

18. Termination of Association. The parties recognize that the provision of sewer service to Blue Creek Ranch and the AEE Property is a vital necessity. Therefore, it is understood that in the event the Association is terminated for any reason, the Association shall convey to Blue Creek and AEE, their successors and assigns, without any consideration, the AEE/Blue Creek Sewer Facilities, together with any and all easements and other assets and

rights of the Association in order that the parties can continue to provide sewer service to the homeowners within each development. Thereafter, the AEE homeowners association and the Blue Creek homeowners association shall be evenly responsible for operating, maintaining, repairing, improving and replacing the AEE/Blue Creek Sewer Facilities.

19. No Conveyance or Encumbrance. Neither AEE nor Blue Creek shall sell, convey, transfer, hypothecate, lease, loan, or encumber the AEE/Blue Creek Sewer Facilities, without the express written consent of the other party.

20. Indemnification. The parties agree to indemnify, defend, and hold the other harmless from any and all claims, liabilities, injuries, deaths, suits, causes of action or losses of any nature whatsoever incurred by either party resulting from any activity undertaken by such party on the property of the other pursuant to this Agreement. The parties hereto intend not to duplicate any legal services or other costs associated with the defense of any claims against either party described in this section. Therefore, the parties hereto agree to cooperate in full to prevent duplicative expenses incurred as a result of the indemnification herein described.

21. Notice. All notices required under this Agreement shall be in writing and shall be hand-delivered or sent by facsimile transmission or registered or certified mail, return receipt requested, postage prepaid, to the addresses of the parties herein set forth. All notices by hand delivery shall be effective upon receipt. All facsimile transmissions shall be effective upon transmission receipt. All notices by mail shall be considered effective seventy-two (72) hours after deposit in the United States mail with the proper address as set forth below. Either party by notice so given may change the address to which future notices shall be sent.

Notice to Blue Creek: Blue Creek Land Holdings, LLC
c/o Rob Cumming
3220 County Road 100
Carbondale, CO 81623

With Copy To: Holland & Hart, LLP
c/o Shane J. Harvey, Esq.
600 E. Main Street
Aspen, CO 81611
Phone: (970) 925-3476
Fax: (970) 925-9367

Notice to AEE: Aspen Equestrian Estates, LLC
c/o Jay Weinberg
PO Box 4788
Aspen, CO 81612

With Copy To: Klein-Zimet P.C.
c/o Herb Klein, Esq.
201 N. Mill
Aspen, CO 81611
Phone: (970) 925-8700

22. Miscellaneous Provisions.

a. This Agreement shall be construed under, and in accordance with, the laws of the State of Colorado.

b. This Agreement shall be binding upon and inure to the benefit of Blue Creek and AEE and their respective legal representatives, successors and assigns.

c. In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

d. This Agreement constitutes the sole and only agreement of Blue Creek and AEE with respect to the sewer service and supersedes any prior understandings or written or oral agreements between Blue Creek and AEE with respect to sewer service. This Agreement may not be amended or modified except by written agreement signed by Blue Creek and AEE.

e. Blue Creek and AEE pledge to utilize their best good faith efforts to act in a timely and reasonable manner to fulfill their obligations hereunder.

f. Words of any gender used in this Agreement shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, and vice versa, unless the context requires otherwise.

g. The section headings utilized herein are for reference purposes only and are not intended in any way to describe, interpret, define or limit the scope, extent or intent of this Agreement or any part hereof.

h. The failure by either Blue Creek or AEE to enforce against the other party any term or provision of this Agreement shall be deemed not to be a waiver of the right of either Blue Creek or AEE to enforce against the other party the same or any other such term or provision.

i. This Agreement may be executed in multiple originals or counterparts, each of which shall be an original and, when Blue Creek and AEE have each signed and provided to the other party at least one (1) copy, such copies together shall constitute a fully executed and binding agreement. Signatures transmitted by facsimile shall be binding as original signatures.

j. If either Blue Creek or AEE files any action or brings any proceeding against the other arising out of this Agreement, then as between Blue Creek and AEE, the substantially prevailing party shall be entitled to recover, as an element of its costs of suit and not as damages, reasonable attorneys' fees to be fixed by the court. A party not entitled to recover its costs shall not recover attorneys' fees. No sum for attorneys' fees shall be counted in calculating the amount of a judgment for purposes of determining whether a party is entitled to attorneys' fees.

k. Nothing herein contained shall be deemed or construed by the parties hereto or by any third person to create the relationship of principal or agent or of partnership or joint venture or of any association between AEE and Blue Creek, except as parties to this Agreement.

IN WITNESS WHEREOF, Blue Creek and AEE have executed this Agreement as of the date first above written.

BLUE CREEK:

BLUE CREEK LAND HOLDINGS, LLC, a Colorado limited liability company

By: LANE INDUSTRIES, INC., a Delaware corporation, its sole manager

By: _____
Name: _____
Title: _____

AEE:

ASPEN EQUESTRIAN ESTATES, a Colorado limited liability company

By: _____
Name: _____
Title: _____

Application Attachment 4

Figure 4 - Flood Plain Map

Preliminary Geotechnical Study, Hepworth-Pawlak Geotechnical, Inc.



Hepworth-Pawlak Geotechnical, Inc.
5020 County Road 154
Glenwood Springs, Colorado 81601
Phone: 970-945-7988

Fax: 970-945-8454
hpgeo@hpgeotech.com

**PRELIMINARY GEOTECHNICAL STUDY
PROPOSED BLUE CREEK RANCH SUBDIVISION
HIGHWAY 82 AND COUNTY ROAD 100
GARFIELD COUNTY, COLORADO**

JOB NO. 100 601

SEPTEMBER 11, 2000

PREPARED FOR:

**WINDRIVER HOLDINGS, LLC
ATTN: ROBERT M. CUMMING, JR.
19351 HIGHWAY 82
CARBONDALE, COLORADO 81623**

HEPWORTH - PAWLAK GEOTECHNICAL, INC.

September 11, 2000

WindRiver Holdings, LLC
Attn: Robert M. Cumming Jr.
19351 Highway 82
Carbondale, Colorado 81623

Job No. 100 601

Subject: Report Transmittal, Preliminary Geotechnical Study, Proposed Blue
Creek Ranch Subdivision, Highway 82 and County Road 100, Garfield
County, Colorado.

Dear Mr. Cumming:

As requested, we have conducted a preliminary geotechnical study for the proposed residential subdivision at Blue Creek Ranch.

The property is suitable for the proposed development based on geologic and geotechnical conditions.

Subsurface conditions encountered in the exploratory pits excavated throughout the property consist of ½ to 1 foot of topsoil overlying up to 3½ feet of soft to medium stiff sandy silty clay and loose silty clayey sand. Below depths of 1½ to 4 feet, dense sandy gravel with cobbles and boulders was encountered. Groundwater was typically encountered between 1½ and 4 feet in the northern part of the property.

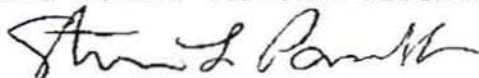
Spread footings placed on the natural gravel subsoils or compacted structural fill and designed for an allowable bearing pressure of 3,000 psf appear suitable for building support. Foundations should be kept shallow to avoid groundwater impacts. The infiltration septic disposal systems should be engineered for the site specific groundwater and soil conditions.

The report which follows describes our exploration, summarizes our findings, and presents our recommendations suitable for planning and preliminary design. It is important that we provide consultation during design, and field services during construction to review and monitor the implementation of the geotechnical recommendations.

If you have any questions regarding this report, please contact us.

Sincerely,

HEPWORTH - PAWLAK GEOTECHNICAL, INC.



Steven L. Pawlak, P.E.

SLP/ksw

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PURPOSE AND SCOPE OF STUDY

This report presents the results of a preliminary geotechnical study for the proposed residential subdivision at Blue Creek Ranch located north of the Roaring Fork River and east of 100 Road, Garfield County, Colorado. The project site is shown on Fig. 1. The purpose of the study was to evaluate the geologic and subsurface conditions and their potential impacts on the project. The study was conducted in accordance with our agreement for professional services to WindRiver Holdings, LLC dated July 24, 2000.

A field exploration program consisting of a reconnaissance and exploratory pits was conducted to obtain information on the site and subsurface conditions. Samples of the subsoils obtained during the field exploration were tested in the laboratory to determine their classification, compressibility or swell characteristics and other engineering properties. Percolation testing was also performed to evaluate the feasibility of infiltration septic disposal systems. The results of the field exploration and laboratory testing were analyzed to develop recommendations for project planning and preliminary design. This report summarizes the data obtained during this study and presents our conclusions and recommendations based on the proposed development and subsurface conditions encountered.

PROPOSED DEVELOPMENT

At the time of this study development plans were in the conceptual stages. The development will be a single family residential project and tree farm. The existing ranch buildings will remain. The tree farm will be located on the high terrace in the northern part of the property. The tree farm will provide a buffer zone between the houses and Highway 82. Nineteen clustered building sites are planned on the upper terrace to the north of the existing ranch buildings. Twenty building sites on large lots are planned to the south of the existing ranch buildings. Private driveways will be used to provide access to the building sites and a dedicated road will provide access to County Road 100. We assume the residences will be typical of those in the area and be

two to three story buildings with slab-on-grade or shallow crawlspace. Extensive site grading will probably not be required for the type of development proposed. The development will have on-site wells and a packaged centralized sewer system.

SITE CONDITIONS

The Blue Creek Ranch subdivision is located in the Roaring Fork valley about three miles up stream from Carbondale. The property is located to the southeast of Catherine's Store near the center of Section 31, T. 7 S., R. 87 W. The Roaring Fork River borders the property on the south. The general topography is shown on Fig. 1. The ground in the area consists of nearly level terraces to the north of the river. The terraces are from about 5 to 15 feet above the river. Ponds and several irrigation ditches are present on the property. Much of the property is irrigated pasture and hay fields. Outside the irrigated areas, vegetation consists of cottonwood trees, grass and brush. Wetlands are present in some of the lower lying parts of the property.

GEOLOGIC SETTING

Regional geology mapping shows that formation rock in the project area is the Pennsylvanian age Eagle Valley Evaporite (Kirkham and Widmann, 1997). Rock outcrops are not present on the property, but outcrops and shallow colluvium (Qc/Pee) are present on the valley to the south of the river. At the project site the Eagle Valley Evaporite is expected to lie below typical foundation excavations depths. The Eagle Valley Evaporite is a gray to tan gypsum, anhydrite and halite with interbedded siltstone, claystone, shale and dolomite. Bedding in the rock is usually complexly folded because of flow of the plastic evaporite. The gypsum, anhydrite and halite are soluble in fresh water. Subsurface voids and related sinkholes are sometimes present in areas where the Eagle Valley Evaporite is present near the ground surface. Evidence of sinkholes was not observed on the property.

Holocene and late Pleistocene alluvium deposited by the Roaring Fork River is present below the terrace on the property. The exploratory pits show that the alluvium typically consists of a thin upper sandy clay that is usually less than 3.5 feet thick. The

underlying alluvium is a dense deposit of rounded gravel, cobbles and boulders in a silty sand matrix. Four terrace levels are present on the property (Qt1 through Qt4). The lowest level represents abandoned river channels. The higher terraces represent former valley floor levels. Along this reach of the Roaring Fork River, the modern river channel transitions from a straight channel pattern up stream of the County Road 100 bridge to a braided channel pattern down stream of the bridge. The lower terraces to the north of the river at the project site show a relict braided stream pattern on the aerial photographs.

FIELD EXPLORATION

The field exploration for the project was conducted on July 28, 2000. Fourteen exploratory pits were excavated at the locations shown on Fig. 1 to evaluate the general subsurface conditions. The pits were dug with a rubber tired backhoe and were logged by a representative of Hepworth-Pawlak Geotechnical, Inc.

Samples of the subsoils were taken by relatively undisturbed and disturbed sampling methods. The undisturbed samples were obtained in the fine-grained soils by hand driven 2 inch diameter liners. The disturbed samples were obtained in the coarse granular soils. Depths at which the samples were taken are shown on the Logs of Exploratory Pits, Fig. 2. The samples were returned to our laboratory for review by the project engineer and testing.

SUBSURFACE CONDITIONS

Graphic logs of the subsurface conditions encountered at the site are shown on Fig. 2. The subsoils consist of about ½ to 1 foot of organic topsoil overlying up to about 3½ feet of soft to medium stiff sandy silty clay and loose silty clayey sand at Pit 8. Below depths from about ½ to 4 feet, relatively dense, slightly silty to silty sandy gravel and cobbles with boulders was encountered to the maximum depth explored of 5½ feet. Digging in the dense gravel with the light duty backhoe was difficult due to the cobbles and boulders.

Laboratory testing performed on samples obtained from the pits included natural moisture content and density and gradation analyses. Results of consolidation testing performed on relatively undisturbed samples of the clay and sand soils, shown on Figs. 4 - 6, indicate moderate to high compressibility under conditions of loading and wetting. Results of a gradation analyses performed on a disturbed bulk sample (minus 5 inch fraction) of the natural gravel with cobbles soils are shown on Fig. 7. The laboratory testing is summarized in Table I.

Free water was generally encountered in Pits 1 through 7 (located in the northern part of the property) at depths of about 1½ to 4 feet and in Pit 14 at a depth of 5 feet. The upper soils were moist to very moist.

GEOLOGIC SITE ASSESSMENT

There are several conditions of a geologic nature that should be considered in project planning and development. These conditions and their expected influence on the proposed development are discussed below.

FLOODING

The low lying ground along the river may be subject to occasional flooding by the Roaring Fork River. A hydrologist should evaluate the flood potential for the project. These evaluations should establish potential flood levels and the need for mitigation to protect proposed structures in the low lying parts of the site. The flood evaluations should also consider the possibility of river reoccupation of the abandoned channels and the possible need for river bank stabilization.

SINKHOLES

Evidence of sinkholes were not observed in the field or on the aerial photographs of the property. The sinkhole risk on the property is viewed to be low and no greater than that present in other parts of the Roaring Fork Valley where the evaporite is near the surface. The potential for shallow subsurface voids that could develop into sinkholes should be considered when planning site specific geotechnical studies at the building sites. If conditions indicative of sinkhole related problems are

encountered, the building site should be abandoned or the feasibility of mitigation evaluated. Mitigation measures could include:

- Stabilization by Grouting
- Stabilization by Excavation and Backfilling
- Deep Foundation Systems
- Structural Bridging
- Mat Foundations
- Set-back from the Sinkhole

Water features such as landscape ponds are not recommended near building sites unless evaluated on a site specific basis. Home owners should be advised of the sinkhole potential, since early detection of foundation distress and timely remedial actions are important in reducing the cost of remediation, should a sinkhole start to develop after construction.

EARTHQUAKE CONSIDERATIONS

The project area could experience moderately strong earthquake related ground shaking. Modified Mercalli Intensity VI ground shaking should be expected during a reasonable service life of the development, but the probability for stronger ground shaking is low. Intensity VI ground shaking is felt by most people and causes general alarm, but results in negligible damage to structures of good design and construction. Occupied structures should be designed to withstand moderately strong ground shaking with little or no damage and not to collapse under stronger ground shaking. The region is in the Uniform Building Code, Seismic Risk Zone 1. Based on our current understanding of the earthquake hazard in this part of Colorado, we see no reason to increase the commonly accepted seismic risk zone for the area.

RADIATION POTENTIAL

The project site is not located on geologic deposits that would be expected to have high concentrations of radioactive minerals. However, there is a potential that radon gas could be present in the area. It is difficult to assess future radon gas concentrations in buildings before the buildings are constructed. Testing for radon gas levels could be done when the residences and other occupied structures have been

completed. New buildings are often designed with provisions for ventilation of lower enclosed areas should post construction testing show unacceptable radon gas concentration.

PRELIMINARY DESIGN RECOMMENDATIONS

The conclusions and recommendations presented below are based on the proposed development, the site reconnaissance, subsurface conditions encountered in the exploratory pits, and our experience in the area. The recommendations are suitable for planning and preliminary design but site specific studies should be conducted for individual lot development.

FOUNDATIONS

Bearing conditions will vary depending on the specific location of the buildings on the property. The subsoils consist of compressible clay and sand soils overlying dense gravel soils. The clays and sands possess low bearing capacity and moderate to high settlement potential. The underlying gravels possess moderate bearing capacity and low settlement potential.

Based on the nature of the proposed construction, spread footings bearing on the natural gravel subsoils should be suitable for building support. We expect the footings can be sized for an allowable soil bearing pressure of 3,000 psf. The overlying fine grained soils may need to be removed to expose the underlying gravels and replaced with compacted structural fill. We can evaluate the feasibility of bearing on the upper fine-grained soils, such as with a lightly loaded monolithic slab foundation, as part of the site specific lot study. Foundation walls should be designed to span local anomalies and to resist lateral earth loadings when acting as retaining structures. The footings should have a minimum depth of 36 inches for frost protection.

BELOW GRADE CONSTRUCTION

Ground water level typically appears shallow throughout the project area. Field sprinkler and flood irrigation could be contributing to the shallow groundwater condition. Due to the shallow water level and flat lying terrain, it will probably not be practical to protect below grade areas from wetting and hydrostatic pressure buildup by use of an underdrain system. We recommend that slab-on-grade floors be placed near to above existing grade and crawlspaces be kept shallow, at least 2 feet above groundwater level. Basement levels may not be feasible. Potential groundwater impacts on proposed development should be evaluated as part of the site specific building study.

FLOOR SLABS

Slab-on-grade construction should be feasible for bearing on the natural soils below the topsoil. There could be some potential for slab settlement where there are compressible clay subgrade soils. To reduce the effects of some differential movement, non-structural floor slabs should be separated from all bearing walls and columns with expansion joints. Floor slab control joints should be used to reduce damage due to shrinkage cracking. A minimum 4 inch thick layer of free-draining gravel should underlie building slabs to break capillary water rise and facilitate drainage.

SURFACE DRAINAGE

The grading plan for the subdivision should consider runoff through the project and at individual sites. Water should not be allowed to pond next to buildings. Exterior backfill should be well compacted and have a positive slope away from the building for a distance of 10 feet. Roof downspouts and drains should discharge well beyond the limits of all backfill.

PAVEMENT SECTION

The near surface soils encountered in the pits below the topsoil consist of poor quality sandy silty clay and fair to good quality sandy gravel. We recommend the pavement section for the site access road consist of a minimum 3 inches of asphalt pavement on 8 inches of Class 6 aggregate base course for the sandy gravel subgrade condition. The subgrade should be evaluated for pavement support at the time of

construction. Subexcavation of the fine-grained soils and replacement with coarse gravel subbase material may be needed to achieve a stable subgrade.

PERCOLATION TESTING

Percolation tests were conducted on July 29, 2000 to evaluate the feasibility of infiltration septic disposal systems. One percolation hole was dug adjacent each of the 14 exploratory pits at the locations shown on Fig. 1. The test holes (nominal 12 inch diameter by 12 inch deep) were hand dug at the bottom of shallow backhoe pits and were soaked with water one day prior to testing. The soils exposed in the percolation holes are similar to those exposed in the exploratory pits shown on Fig. 2. The percolation test results are presented in Table II. The infiltration septic system disposal systems should be engineered for the site specific groundwater and soil conditions.

LIMITATIONS

This study has been conducted according to generally accepted geotechnical engineering principles and practices in this area at this time. We make no warranty either expressed or implied. The conclusions and recommendations submitted in this report are based upon the data obtained from the field reconnaissance, review of published geologic reports, the exploratory pits located as shown on Fig. 1 and to the depths shown on Fig. 2, the proposed type of construction and our experience in the area. Our findings include interpolation and extrapolation of the subsurface conditions identified at the exploratory pits and variations in the subsurface conditions may not become evident until excavation is performed. If conditions encountered during construction appear different from those described in this report, we should be notified so that re-evaluation of the recommendations may be made.

This report has been prepared for the exclusive use by our client for planning and preliminary design purposes. We are not responsible for technical interpretations by others of our information. As the project evolves, we should provide continued consultation, conduct additional evaluations and review and monitor the implementation of our recommendations. Significant design changes may require additional analysis or modifications to the recommendations presented herein. We recommend on-site

observation of excavations and foundation bearing strata and testing of structural fill by a representative of the geotechnical engineer.

Respectfully Submitted,

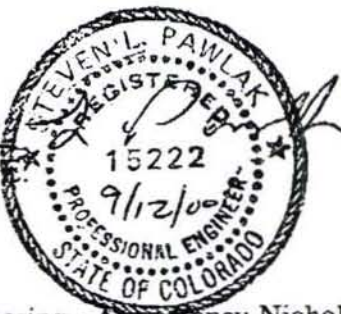
HEPWORTH - PAWLAK GEOTECHNICAL, INC.

Ralph G. Mock

Ralph G. Mock
Engineering Geologist

and by:

Steven L. Pawlak
Steven L. Pawlak, P.E.

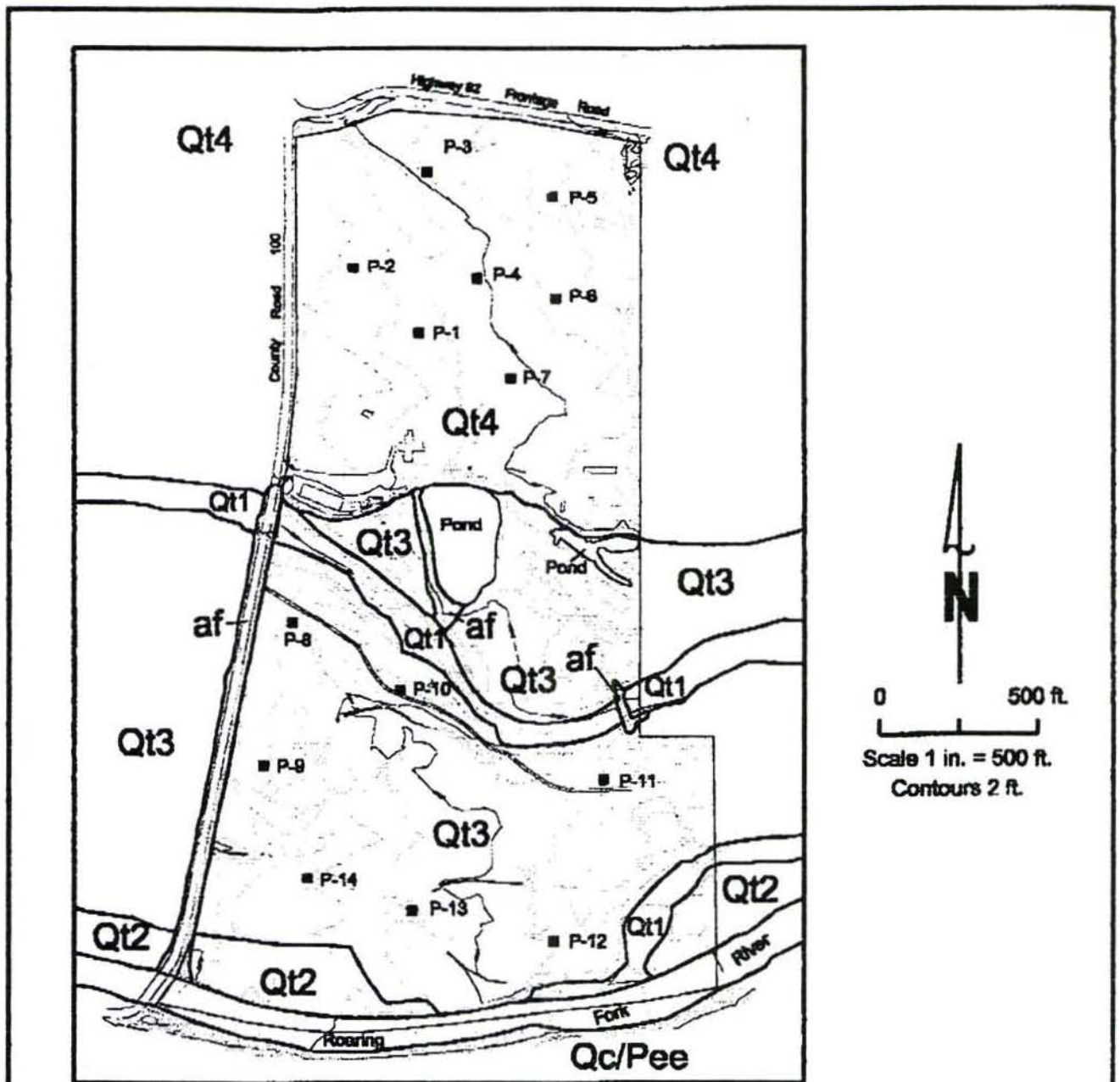


SLP/ksw

cc: Sopris Engineering - Attn: Nancy Nichol
Design Workshop, Inc. - Attn: Sheri Sanzone
Davis Horn, Inc. - Attn: Glen Horn

REFERENCE

Kirkham, R.M. and Widmann, B.L., 1997, *Geology Map of the Carbondale Quadrangle, Garfield County, Colorado*, Colorado Geological Survey Open File 97-3.



EXPLANATION:

af - Man-Placed Fill

Qc - Colluvium

Qt1 - Abandoned River Channels

Qt2 - Low River Terrace

Qt3 - Intermediate River Terrace

Qt4 - High River Terrace

Pee - Eagle Valley Evaporite

— Contact (approx.)

P-1 ■ Exploratory Pit

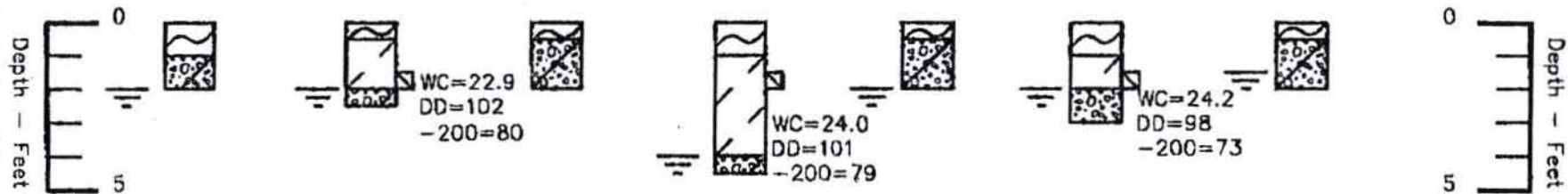
100 601

HEPWORTH - PAWLAK
GEOTECHNICAL, INC.

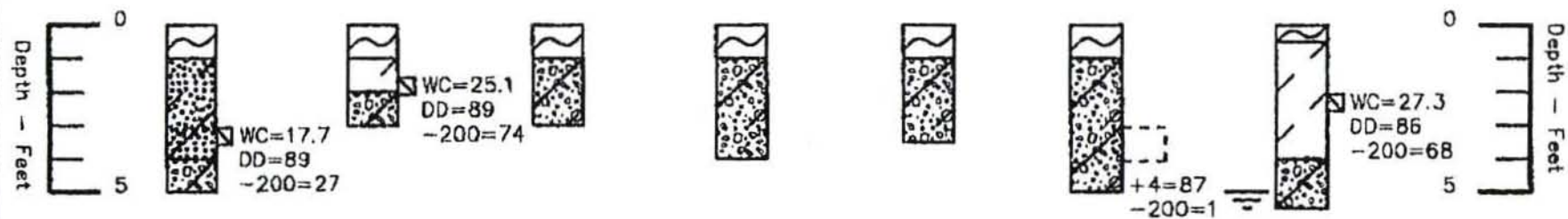
LOGS OF EXPLORATORY PITS

Fig. 2

PIT 1 ELEV. = 6287' PIT 2 ELEV. = 6284' PIT 3 ELEV. = 6292' PIT 4 ELEV. = 6290' PIT 5 ELEV. = 6296' PIT 6 ELEV. = 6293' PIT 7 ELEV. = 6290'



PIT 8 ELEV. = 6276' PIT 9 ELEV. = 6276' PIT 10 ELEV. = 6278' PIT 11 ELEV. = 6280' PIT 12 ELEV. = 6282' PIT 13 ELEV. = 6278' PIT 14 ELEV. = 6276'



Note: Explanation of symbols is shown on Fig. 3.

LEGEND:



TOPSOIL; organic silty clay, soft, moist to very moist, dark brown.



CLAY (CL); silty, sandy, soft to medium stiff, very moist to wet, mixed brown, low plasticity.



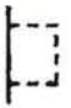
SAND (SM-SC); silty, clayey, loose, very moist, dark brown.



GRAVEL AND COBBLES (GM-GP); with boulders, sandy, slightly silty to silty, dense, moist to very moist with depth, mixed brown, rounded to subrounded rock.



2" Diameter hand driven liner sample.



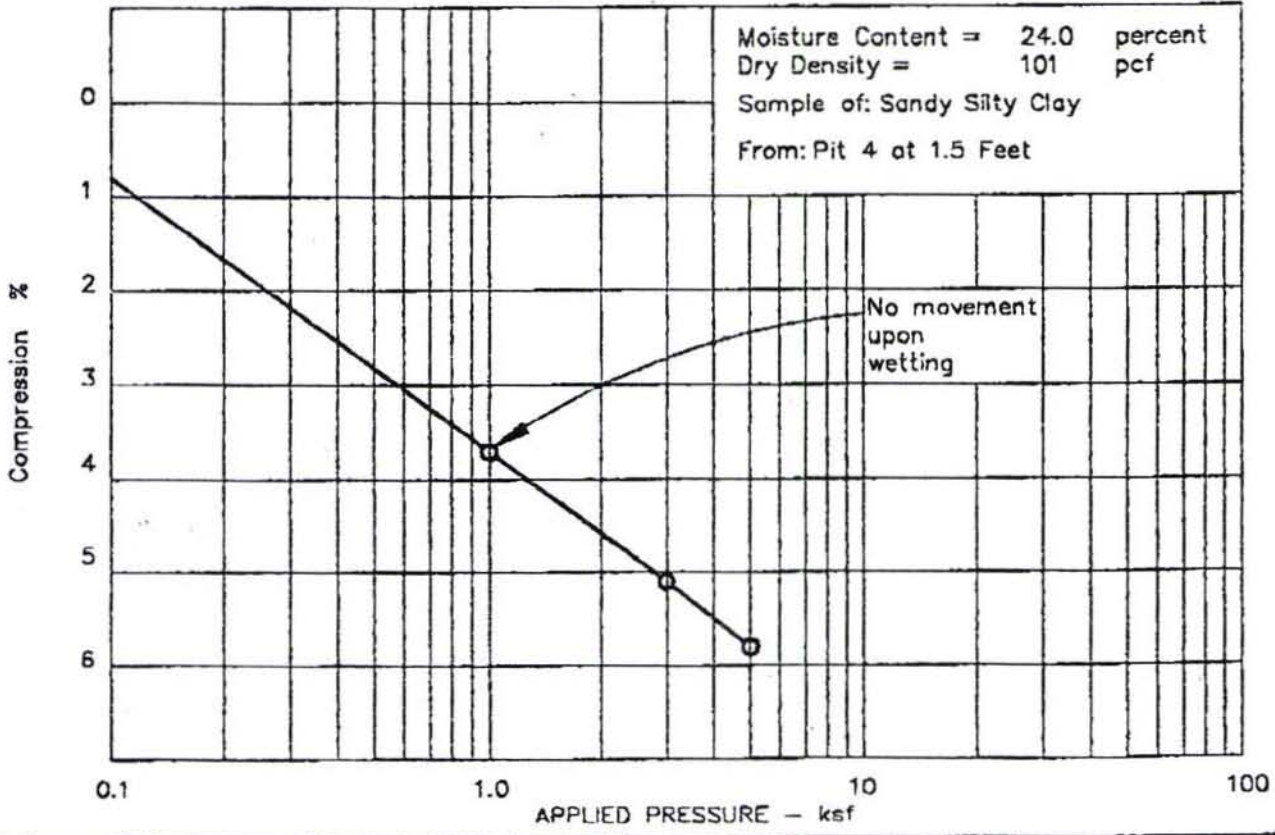
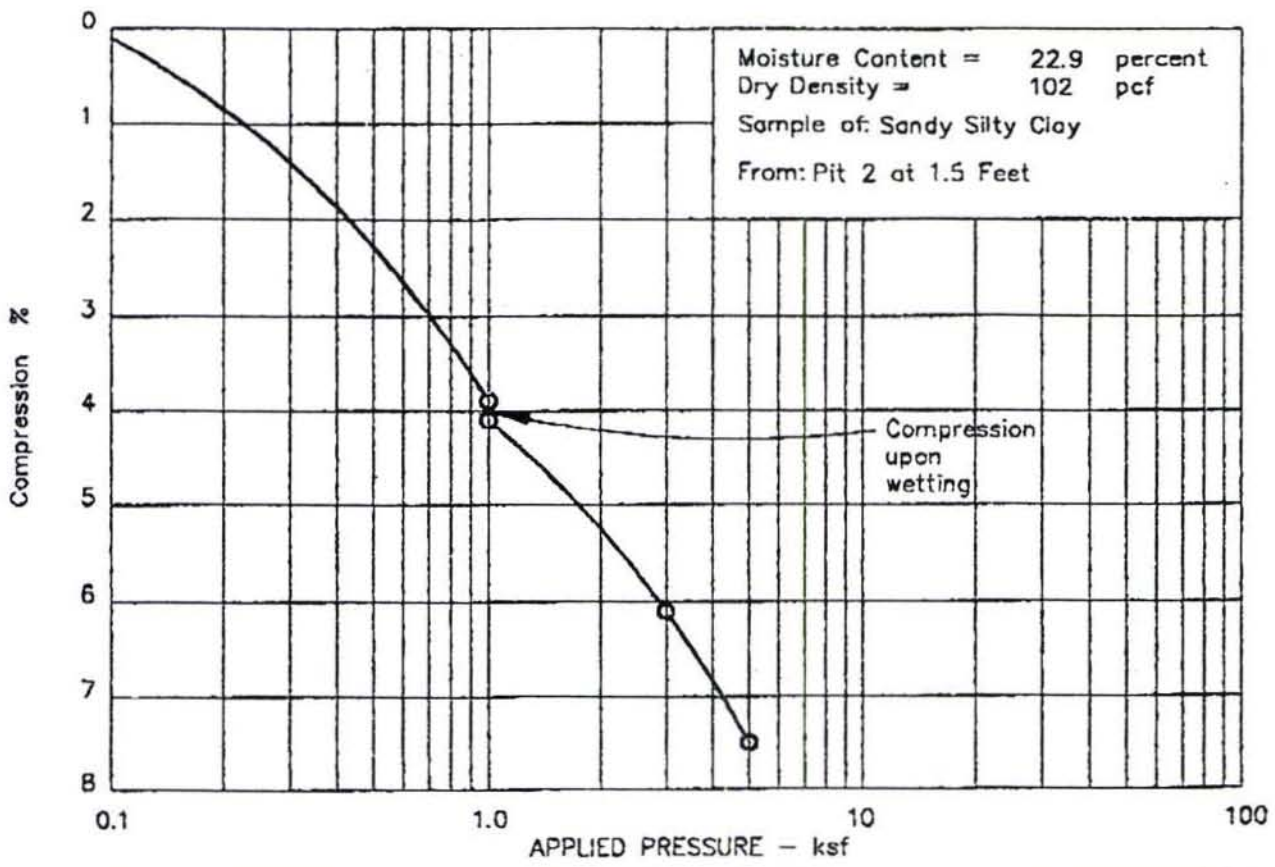
Disturbed bulk sample.

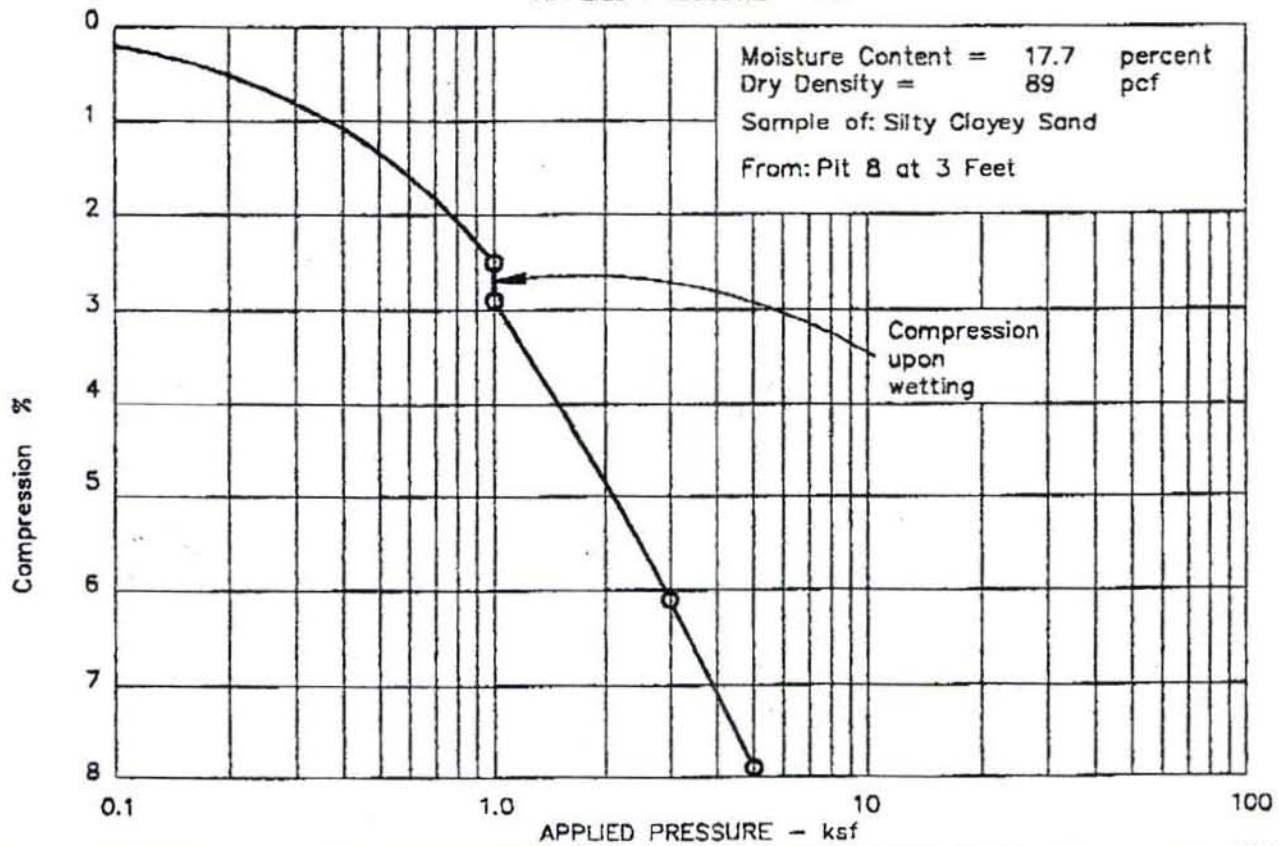
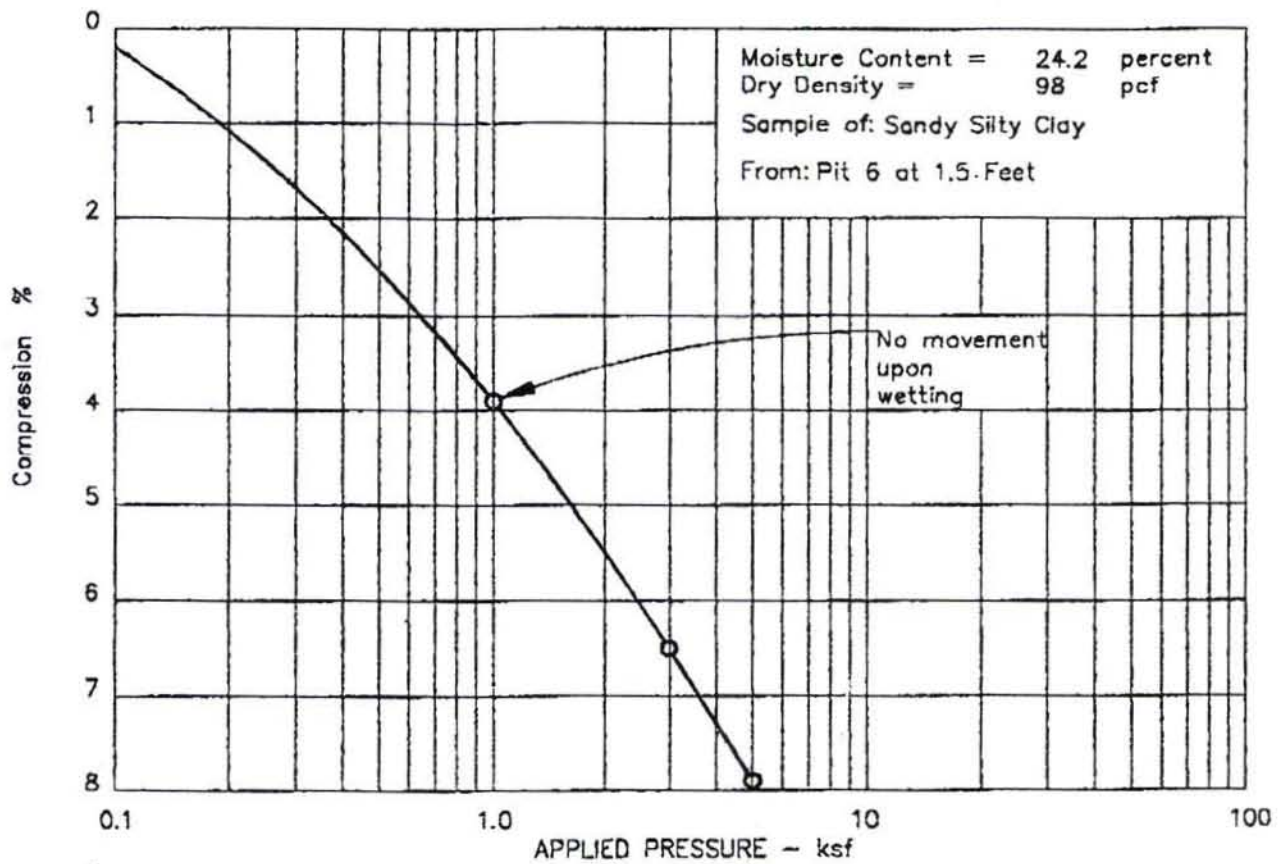


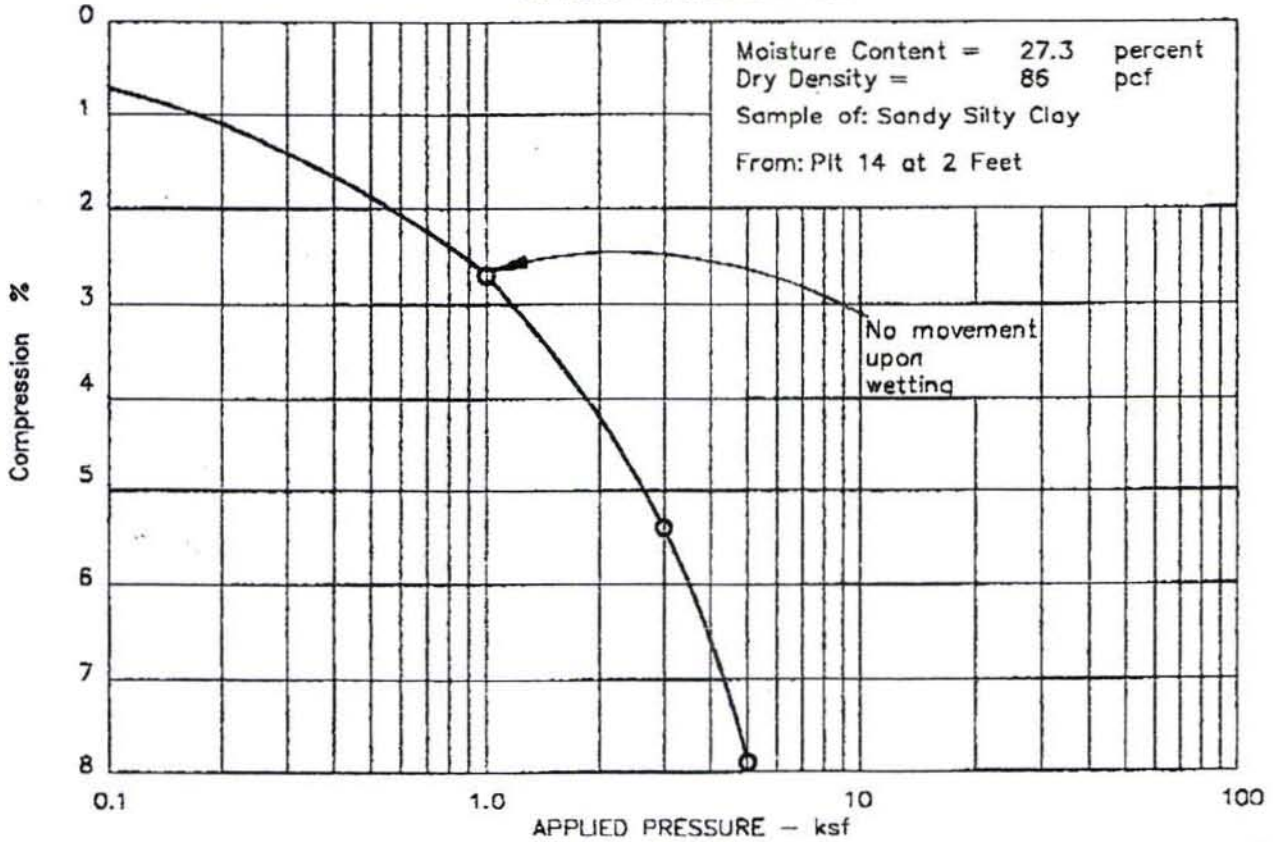
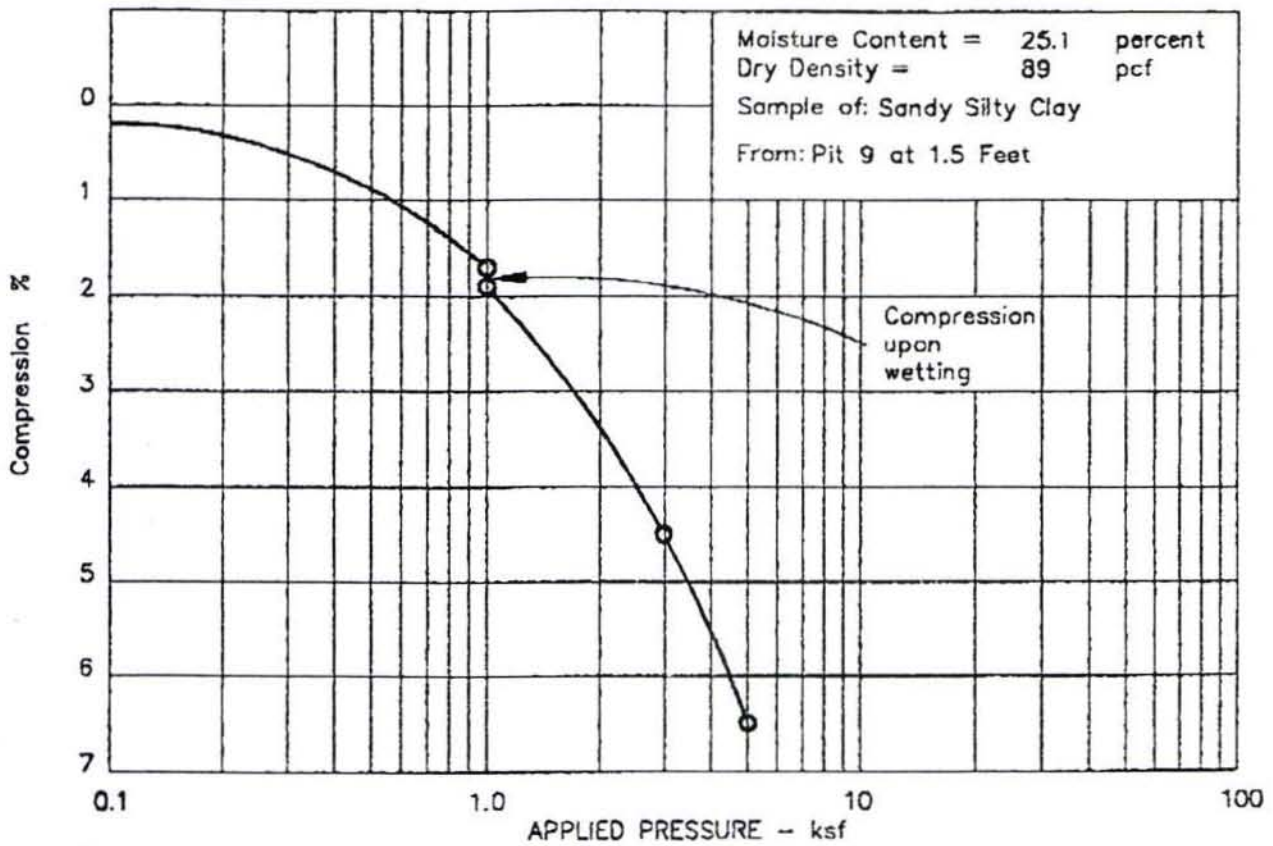
Free water level in pit at time of excavating.

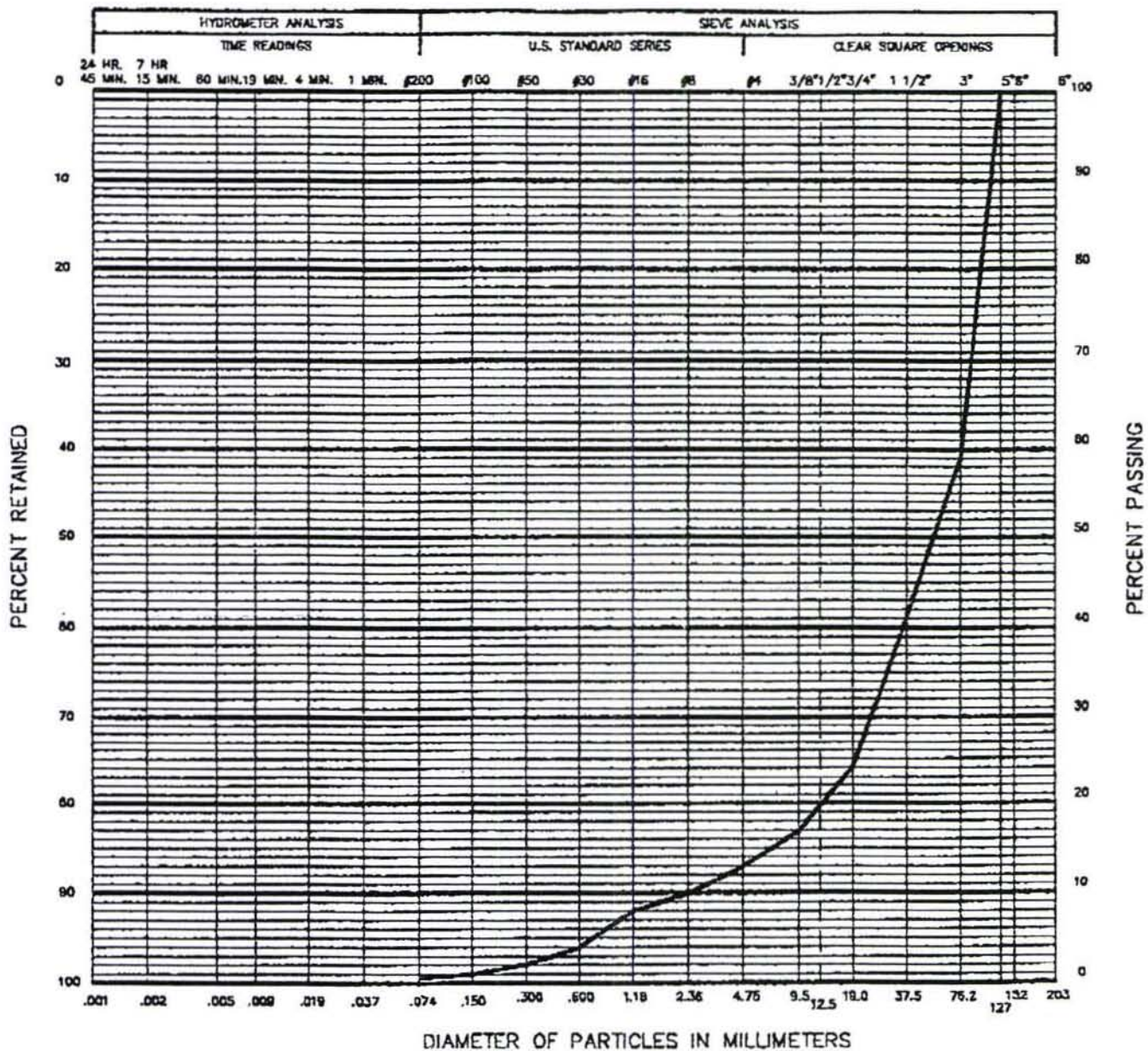
NOTES:

1. Exploratory pits were excavated on July 28, 2000 with a backhoe.
2. Locations and elevations of exploratory pits were provided by Sopris Engineering. Pit logs are drawn to depth.
3. The exploratory pit locations and elevations should be considered accurate only to the degree implied by the method used.
4. The lines between materials shown on the exploratory pit logs represent the approximate boundaries between material types and transitions may be gradual.
5. Water level readings shown on the logs were made at the time and under the conditions indicated. No free water was encountered in Pits 3 and 8 thru 13. Fluctuations in water level may occur with time.
6. Laboratory Testing Results:
WC = Water Content (%)
DD = Dry Density (pcf)
+4 = Percent retained on No. 4 sieve
-200 = Percent passing No. 200 sieve









CLAY TO SILT	SAND		GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE

GRAVEL 87 % SAND 12 % SILT AND CLAY 1 %

LIQUID LIMIT % PLASTICITY INDEX %

SAMPLE OF: Sandy Gravel and Cobbles FROM: Pit 13 at 3 thru 4 Feet

100 601

HEPWORTH - PAWLAK
GEOTECHNICAL, INC.

GRADATION TEST RESULTS

Fig. 7

HEPWORTH-PAWLAK GEOTECHNICAL, INC.

TABLE I

JOB NO. 100 601

SUMMARY OF LABORATORY TEST RESULTS

SAMPLE LOCATION		NATURAL MOISTURE CONTENT (%)	NATURAL DRY DENSITY (pcf)	GRADATION		PERCENT PASSING NO. 200 SIEVE	ATTERBERG LIMITS		UNCONFINED COMPRESSIVE STRENGTH (PSF)	SOIL OR BEDROCK TYPE
FIT	DEPTH (feet)			GRAVEL (%)	SAND (%)		LIQUID LIMIT (%)	PLASTIC INDEX (%)		
2	1 ½	22.9	102			80				Sandy Silty Clay
4	1 ½	24.0	101			79				Sandy Silty Clay
6	1 ½	24.2	98			73				Sandy Silty Clay
8	3	17.7	89			27				Silty Clayey Sand
9	1 ½	25.1	89			74				Sandy Silty Clay
13	3 - 4			87	12	1				Sandy Gravel and Cobbles
14	2	27.3	86			68				Sandy Silty Clay

TABLE II

PERCOLATION TEST RESULTS

JOB NO. 100 601

Page 1 of 5

HOLE NO.	HOLE DEPTH (INCHES)	LENGTH OF INTERVAL (MIN)	WATER DEPTH AT START OF INTERVAL (INCHES)	WATER DEPTH AT END OF INTERVAL (INCHES)	DROP IN WATER LEVEL (INCHES)	AVERAGE PERCOLATION RATE (MIN./INCH)
P-1	15 ½	15 water added	8 ½	6 ¾	1 ¾	20
			6 ¾	5 ¾	1	
			9	7 ¾	1 ¼	
			7 ¾	6 ½	1 ¼	
			6 ½	5 ½	1	
			5 ½	4 ½	1	
			4 ½	3 ¾	¾	
			3 ¾	3	¾	
P-2	15	15	11	8 ¾	2 ¾	24
			8 ¾	7 ½	¾	
			7 ½	7	½	
			7	6 ½	½	
			6 ½	5 ½	½	
			5 ½	4 ¾	¾	
			4 ¾	4 ¾	½	
			4 ¾	3 ½	¾	
P-3	23	15 water added	5	3 ½	1 ½	30
			3 ½	2 ¾	¾	
			4 ½	3 ¾	¾	
			3 ¾	3	¾	
		water added	5	4	1	
			4	3 ¾	¾	
			3 ¾	2 ¾	½	
			2 ¾	2 ¾	½	

Note: Percolation tests were conducted adjacent to corresponding exploratory pits located as shown on Fig. 1. Percolation test holes were hand dug and soaked on July 28, 2000. Percolation tests were conducted on July 29, 2000 by Hepworth - Pawlak Geotechnical, Inc.

TABLE II

PERCOLATION TEST RESULTS

JOB NO. 100 601

Page 2 of 5

HOLE NO.	HOLE DEPTH (INCHES)	LENGTH OF INTERVAL (MIN)	WATER DEPTH AT START OF INTERVAL (INCHES)	WATER DEPTH AT END OF INTERVAL (INCHES)	DROP IN WATER LEVEL (INCHES)	AVERAGE PERCOLATION RATE (MIN./INCH)	
P-4	15	15	9	3 ¾	5 ¾	8	
			water added	9	6		3
			6	3	3		
		water added	9 ¼	6 ¼	2 ½		
			6 ¾	4 ¾	2		
			4 ¾	2 ¾	2		
			2 ¾	1	1 ¾		
P-5	11	15	6	4 ¾	1 ¾	17	
			water added	4 ¾	4		¾
			4	2 ½	1 ½		
			6 ¾	5 ¾	½		
			5 ¾	4 ¾	1		
			4 ¾	4	¾		
			4	3	1		
			3	2 ¼	¾		
P-6	16	15	8 ¾	5 ¾	3	13	
			water added	5 ¾	3 ¾		2
			3 ¾	2	1 ¾		
			2	1	1		
			10 ½	8 ¾	2 ¾		
			8 ¾	6 ½	1 ¾		
			6 ½	5 ¾	1 ¾		
			5 ¾	4 ¾	1		

Note: Percolation tests were conducted adjacent to corresponding numbered exploratory pits located as shown on Fig. 1. Percolation test holes were hand dug and soaked on July 28, 2000. Percolation tests were conducted on July 29, 2000 by Hepworth - Pawlak Geotechnical, Inc.

HEPWORTH-PAWLAK GEOTECHNICAL, INC.

TABLE II

PERCOLATION TEST RESULTS

JOB NO. 100 601

Page 3 of 5

HOLE NO.	HOLE DEPTH (INCHES)	LENGTH OF INTERVAL (MIN)	WATER DEPTH AT START OF INTERVAL (INCHES)	WATER DEPTH AT END OF INTERVAL (INCHES)	DROP IN WATER LEVEL (INCHES)	AVERAGE PERCOLATION RATE (MIN./INCH)	
P-7	11 ½	15	5 ¾	2 ¾	3	20	
			2 ¾	¾	2		
			water added	6	4 ½		1 ½
			4 ½	3 ½	1		
		water added	5 ¾	4 ½	1 ¾		
			4 ½	4	½		
			4	3 ¾	¾		
			3 ¾	2 ½	¾		
P-8	23	15	8 ¾	5 ½	3 ¾	8	
			water added	9 ¾	6 ¾		3
			6 ¾	4	2 ¾		
			4	2	2		
		water added	9 ½	6 ¾	2 ¾		
			6 ¾	4 ¾	2		
			4 ¾	3	1 ¾		
			3	1	2		
P-9	26 ½	15	8 ¾	3 ½	4 ¾	7	
			water added	9 ¾	5 ¾		4
			5 ¾	1 ¾	3 ½		
		water added	9 ¾	7 ¾	2		
			7 ¾	5 ½	2 ¾		
			5 ½	3	2 ¾		
			3	1	2		

Note: Percolation tests were conducted adjacent to corresponding exploratory pits located as shown on Fig. 1. Percolation test holes were hand dug and soaked on July 28, 2000. Percolation tests were conducted on July 29, 2000 by Hepworth - Pawlak Geotechnical, Inc.

TABLE II

PERCOLATION TEST RESULTS

JOB NO. 100 601

Page 4 of 5

HOLE NO.	HOLE DEPTH (INCHES)	LENGTH OF INTERVAL (MIN)	WATER DEPTH AT START OF INTERVAL (INCHES)	WATER DEPTH AT END OF INTERVAL (INCHES)	DROP IN WATER LEVEL (INCHES)	AVERAGE PERCOLATION RATE (MIN./INCH)	
P-10	18	15	6	1 ½	4 ½	15	
			water added	5	3 ¾		1 ¼
		water added	3 ¾	2 ¾	1		
			5	3 ½	1 ½		
			3 ½	2 ½	1		
			2 ½	1 ½	1		
P-11	26 ½	15	6	3 ½	2 ½	13	
			water added	3 ½	1 ¼		2 ¾
		water added	4 ½	2 ½	2		
			2 ½	1	1 ½		
			7	5 ½	1 ½		
		water added	5 ½	4 ½	1		
			4 ½	3 ¾	1 ¼		
P-12	23		15	5 ¾	2 ¾	3	7
				water added	2 ¾	1	
		water added	5 ½	3 ½	2		
			3 ½	1 ¼	2 ¾		
			4 ½	2 ¾	2 ¾		
			water added	4 ½	2	2 ½	
water added	2 ¾	¾	2				

Note: Percolation tests were conducted adjacent to corresponding exploratory pits located as shown on Fig. 1. Percolation test holes were hand dug and soaked on July 28, 2000. Percolation tests were conducted on July 29, 2000 by Hepworth - Pawlak Geotechnical, Inc.

HEPWORTH-PAWLAK GEOTECHNICAL, INC.

TABLE II

PERCOLATION TEST RESULTS

JOB NO. 100 601

Page 5 of 5

HOLE NO.	HOLE DEPTH (INCHES)	LENGTH OF INTERVAL (MIN)	WATER DEPTH AT START OF INTERVAL (INCHES)	WATER DEPTH AT END OF INTERVAL (INCHES)	DROP IN WATER LEVEL (INCHES)	AVERAGE PERCOLATION RATE (MIN./INCH)
P-13	23 ½	15	6	1 ½	4 ½	3
		water added	6 ½	1 ¼	5 ¼	
		water added	6	1 ¾	4 ¼	
		water added	6	1	5	
		water added	7	½	6 ½	
P-14	23	15	7 ½	5	2 ½	15
		water added	5	3 ¼	1 ¾	
		water added	8	6 ¼	1 ¾	
		water added	6 ½	4 ½	1 ¾	
		water added	4 ½	2 ½	2	
		water added	8	6	2	
		water added	6	4 ½	1 ½	
		water added	4 ½	3 ½	1	
		water added	3 ½	2 ½	1	

Note: Percolation tests were conducted adjacent to corresponding exploratory pits located as shown on Fig. 1. Percolation test holes were hand dug and soaked on July 28, 2000. Percolation tests were conducted on July 29, 2000 by Hepworth - Pawlak Geotechnical, Inc.

PATRICK & STOWELL

Attorneys at Law

September 7, 2000

Erwin T. Patrick
Brian E. Stowell
Scott C. Miller
Ramsey L. Kropl
Sara M. Dunn

Mr. Rob Cumming
Mr. Ace Lane
WindRiver Development Company, LLC
5680 Grand River Dr., N.E.
Ada, Michigan 49301

Licensed in AZ, CO, WY

Re: Legal Access for Blue Creek Ranch, (our file 597A)

Dear Ace and Rob:

You have asked us to provide a legal opinion as to access to the Blue Creek Ranch property, as legally described in the attached Exhibit to the Title Commitment. The west boundary of the property has frontage on County Road 100 and the north boundary of the property has frontage on Colorado State Highway 82. It is our opinion there is legal access to these public right of ways and that there are no access impediments.

If you have any questions in this regard, please do not hesitate to contact me.

Very truly yours,

PATRICK & STOWELL, P.C.
A Professional Corporation

By: 

Scott C. Miller
miller@waterlaw.com

cc: Glenn Horn

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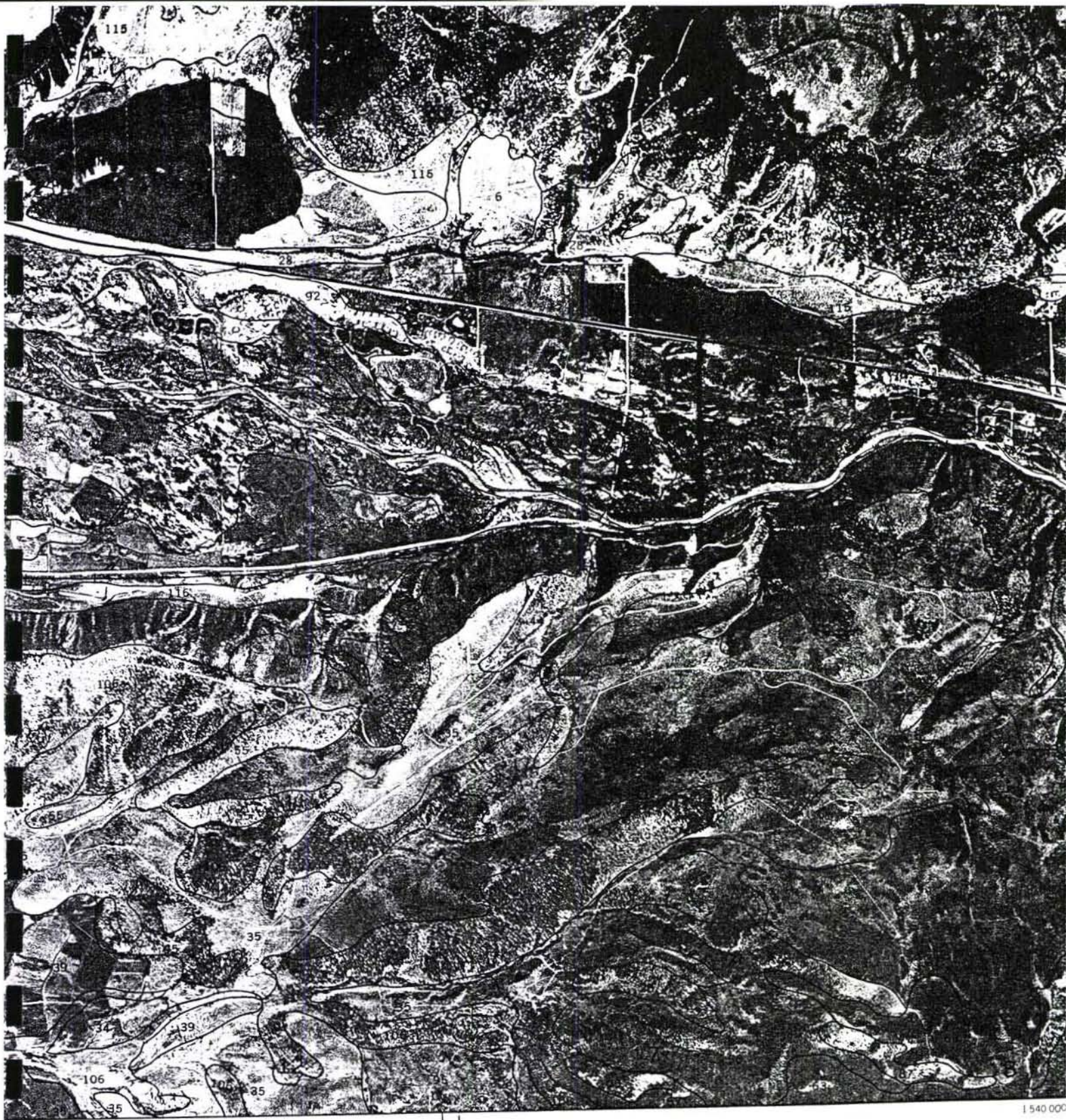
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APPENDIX 10

Wildlife habitat lies:	Entirely in Area	Partly in Area	Within 1 Mile	Out of Area
Peregrine Falcon Active Nest	—	—	—	
Peregrine Falcon Nesting Area	—	—	—	
Peregrine Falcon Migratory Hunting Habitat	—	—	—	
Pronghorn Antelope Overall Range	—	—	—	
Pronghorn Antelope Winter Range	—	—	—	
Pronghorn Antelope Winter Concentration Area	—	—	—	
Plamigan Potential Habitat	—	—	—	
Raptors	—	—	—	
Razorback Sucker	—	—	—	
River Otter Overall Range	—	—	—	
Sage Grouse Brood Area	—	—	—	
Sage Grouse Overall Range	—	—	—	
Sage Grouse Production Area	—	—	—	
Sage Grouse Winter Area	—	—	—	
Wild Turkey Overall Range	—	—	—	
Wild Turkey Production Area	—	—	—	
Wild Turkey Winter Range	—	—	—	
Wild Turkey Winter Concentration Area	—	—	—	
Wild Turkey Roosting Sites	—	—	—	
Wolverine Possible Sighting	—	—	—	

The following page is a photo copy of Sheet No. 20 Soil Survey of Aspen-Gypsum Area, Colorado Parts of Eagle, Garfield and Pitkin Counties. The photo copy is not legible. It identifies soil types 13 and 92. In our original submission, Jeff Laurien stated that all of the soils types on the subject property had not been identified. This is incorrect. The applicant has identified all of the soil types shown on Sheet No. 20.

Laurien requested that we submit the Soils Conservation Service interpretation tables. The Soil Survey of Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield and Pitkin Counties includes 115 pages of tables. Rather than copy all of the tables, the applicant is submitting a copy of the Soil Survey of Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield and Pitkin Counties with the land use application.



R. 88 W. R. 87 W.

N

13 + 92

Soil Types

ORADO NO. 20

Non-Technical Descriptions

Soil Survey Area: 655 ASPEN-GYPSUM AREA, COLORADO, PARTS OF

Map unit: 115 Yamo loam, 6 to 12 percent slopes

Description Category: SOI

This deep, well-drained soil is on fans and toe-slopes. It formed in colluvium derived dominantly from sandstone, shale, and gypsum. The surface layer is loam 8 inches thick. The subsoil is loam 6 inches thick. The substratum to a depth of 60 inches or more is loam. Permeability is moderate. Available water capacity is high. Effective rooting depth is 60 inches or more. Runoff is medium to rapid, and the hazard of water erosion is high to very high.

Map unit: 13 Atencio-Azeltine complex, 3 to 6 percent slopes

Description Category: SOI

This map unit is on alluvial fans and terraces. This unit is 60 percent Atencio sandy loam and 30 percent Azeltine gravelly sandy loam.

The Atencio soil is deep and well-drained. It formed in alluvium derived dominantly from sandstone and shale. The surface layer is sandy loam 10 inches thick. The subsoil is sandy clay loam 10 inches thick over gravelly sandy loam 4 inches thick. The

upper 6 inches of the substratum is gravelly sandy loam. The lower part to a depth of 60 inches is very gravelly sand. In some areas the surface layer is gravelly or cobbly. Permeability is moderate to a depth of 30 inches and rapid below this depth. Available water capacity is low. Effective rooting depth is 60 inches or more. Runoff is slow, and the hazard of water erosion is slight to moderate.

The Azeltine soil is deep and well-drained. It formed in alluvium derived dominantly from sandstone and shale. Permeability is moderate in upper part, and rapid below a depth of 16 inches. Available water capacity is very low. Effective rooting depth is 60 inches or more. Runoff is slow, and the hazard of water erosion is slight to moderate.

Map unit: 92 Redrob loam, 1 to 6 percent slopes

Description Category: SOI

This deep, somewhat poorly-drained soil is on alluvial valley floors, low terraces, and flood plains. It formed in mixed alluvium derived dominantly from sandstone and shale. The surface layer is loam 14 inches thick. The next layer is stratified stony loam 6 inches thick. The underlying material to a depth of 60 inches is stony and very cobbly loamy sand and sand. Permeability is moderate. Available water capacity is low. Effective rooting depth is 60 inches for water-tolerant plants but is limited to depths between 20 and 40 inches for non-water-tolerant plants. Runoff is slow to medium, and the hazard of water erosion is slight to high on the steeper slopes. A high water table is at a depth of 18 to 48 inches year-round. This soil is subject to brief periods of flooding in May to July. Ice jams also cause flooding during prolonged cold periods in winter.

**ENGINEERING REPORT
AND
SITE APPLICATION**

FOR THE

**Blue Creek Ranch
Wastewater Treatment Facility**

Garfield County

Applicant:

Blue Creek Land Holdings, LLC
c/o Robert Cumming, Jr.
19351 Highway 82
Carbondale, CO 81623
Phone: (970) 704-1165

Prepared By:

Zancanella & Associates, Inc.
P.O. Box 1908
Glenwood Springs, CO 81602
(970) 945-5700

Thomas A. Zancanella, P.E. #20481

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Appendix A - Manufacturer and Equipment Information Page 25

INTRODUCTION

Blue Creek Ranch is an 82 acre tract located in the center portion of Section 31, Township 7 South, Range 87 West of the 6th P.M. as shown on the 1-Mile map, (See Application Attachment 2 - Figure 2). The subject property is located generally south and east of the Catherine Store Intersection on County Road 100. The existing Ranch currently consists of two homes and several buildings associated with the ranching industry. Water service is provided by a well and wastewater is served by septic tanks and leach fields. Blue Creek Land Holdings, LLC acquired the property and proposes to build approximately 40 single family units and six affordable housing units on the property. A portion of the existing pasture on the property may be used for a tree farm and horse boarding. The remainder of the property will be left in its natural state.

The proposed 40 residential units and tree farm/horse boarding development will result in an estimated 52 Equivalent Residential Units (EQRs) of water demand. A lift station and Recirculating Filter System (RFS) providing for 0.02 MGD of treatment is proposed for the development. This facility will discharge to the Roaring Fork River.

PLANT SITE AND SERVICE AREA

The proposed lift station and RFS plant will serve the proposed development within the Blue Creek Ranch property as described in Site Application Attachment 6, Exhibit "A". The proposed development will consist of a mixture of Affordable, Free Market and Luxury single family homes and up to 10,000 sq.ft. of tree farm/nursery irrigation. The resultant water demand for the development equals 52 EQRs. Currently, the breakdown of the EQRs is as follows; five associated with the Affordable Units, 45 with the Free Market Units, and two for the tree farm/nursery. The breakdown of EQRs may change as development plans proceed. A detailed breakdown of the water requirements is presented on the attached Table 1.

The lift station and plant will be located on the property near the proposed southern entrance and County Road 100, see Figure 3 attached to this report. This location allows for the minimum 100' setback between the plant and habitable buildings. Access to the site will be

along a short section of the proposed trail along County Rd. 100, facilitating ease of access and minimizing any inconveniences to residents during operation and maintenance. The plant and lift station will be built in a single phase. The effluent from the plant will be piped to a discharge point on the Roaring Fork River near the County Road 100 Bridge. The location of the proposed wastewater plant and lift station in relation to other water and wastewater plants can be seen on Figure 1 and Figure 2 of the attached Site Application.

The proposed lift station and wastewater treatment facility is not located within the 100-year flood plain and there are no other natural hazards that threaten the facility. We have included the FEMA Area Flood Plain Map and the Preliminary Geotechnical Study by HPGeotech. (See Application Attachment 4)

ALTERNATIVES

Offsite

There is currently no facility in place to provide wastewater treatment for the proposed development identified in this report. The existing ranch house and buildings are currently served by an on-site septic systems. Blue Creek Ranch is not located in the service area of an existing wastewater provider or 201 plan. Blue Creek Ranch is not within the revised Planning Areas (#1 or #2) of the Town of Carbondale's updated 201 facility plan. The Town of Carbondale is nearly 17,000 feet away and there is no practical way to serve the Blue Creek Ranch Subdivision. The Ranch at Roaring Fork, St. Finnbar Farms, and Aspen Equestrian Estates are currently served by an existing plant located at The Ranch at Roaring Fork. Blue Creek Ranch is not within the Ranch at Roaring Fork's approved service area.

The applicant has analyzed opportunities for consolidation with area treatment works and has determined that consolidation is not feasible. It is initially noted that the approved water quality management plan (NWCOG 208 plan) does not recommend consolidation of Blue Creek Ranch with the Ranch at Roaring Fork or other provider.

The applicant has had discussions with the Mid Valley Metropolitan District (MVMD). MVMD's

treatment plant is located over three miles upstream of Blue Creek Ranch. In 1998/1999, MVMD attempted to expand its service area to serve the mid-valley area down to the Town of Carbondale boundaries, however, the service area expansion was rejected by Garfield County Board of County Commissioners. MVMD has clearly expressed no interest in attempting another service area expansion to include Blue Creek Ranch and thus, is not offering service to the applicant.

The applicant has had discussions with representatives of the Ranch at Roaring Fork (RRF). Consolidation with RRF is deemed not to be a feasible alternative. The existing plant is permitted for 100,000 gallons/day of hydraulic loading and 150 lbs BOD. The current dedicated demands to their system are as follows: 45,000 gpd for existing uses at RRF, 7,500 gpd for planned single family homes at RRF, 5,000 gpd for St. Finnbar Farms, 14,000 gpd for Aspen Equestrian Estates, and 10,000 gpd safety factor due to variable amounts of infiltration. The total dedicated demands on the existing plant is approximately 81,500 gpd. The proposed design flow projection for Blue Creek Ranch is 19,110 gpd. The combined demand would be approximately 100,610 gpd exceeding 95% the existing plant's capacity by nearly 6,000 gpd.

To meet additional demand the second Phase of the RRF facility would need to be built. Phase II expansion would consist of the addition of an additional aeration basin and digester. The RRF has stated they would charge no less than \$7500.00 per EQR, and likely more, to provide service to Blue Creek Ranch. The applicant would also need to pay for easement and acquisition and line sharing with two downstream neighbors; Aspen Equestrian Estates and St. Finnbar. Discussions with these entities indicate the up-front costs for these rights would be \$200,000. Therefore, consolidation with RRF would cost a minimum of \$600,000, greatly exceeding the \$250,000 estimate for the proposed on-site lift station and RFS. As such, the cost of consolidation with the Ranch at Roaring Fork is 240% more costly than the on-site alternatives and therefore, not feasible from an economic analysis.

In addition, a 3/4 majority of the RRF Homeowners is required for the acceptance of any additional sewage flows to the plant. In the past the Homeowners have demonstrated a

reluctance to provide any additional connections and rarely do more than 50-60% of the Homeowners ever turn out to vote. The existing covenants are written such that a non-voting member is considered a "no" vote. Therefore, the applicant believes there may be insurmountable "legal constraints" to extending service to this area at this time.

On-Site

Various on-site alternatives were evaluated for this project which include:

1. Design and construction Individual Sewage Treatment Systems (ISTS).
2. Design and construction of a Aerated Lagoon System.
3. Design and construction of an AeroMod System by Meurer Research, Inc.

These alternatives were dismissed due to cost constraints, and operational and maintenance costs.

PROPOSED FACILITY

The proposed system will consist of single or clustered septic tanks for solids removal, a gravity sewer will convey the tank effluent to a lift station which will pump to the treatment facility. The Recirculating Filter System (RFS), in our opinion, is the best solution to serve the Blue Creek Ranch's needs. We are currently proposing a plant capacity of 0.02 MGD, with a dual RFS to serve the needs of the Blue Creek Ranch development. Blue Creek Ranch will have an estimated flow rate of approximately 12,740 gpd. The effluent will be discharged to the Roaring Fork River near the County Road 100 bridge. This report contains the proposed treatment facility layout and details required for site application submittal. Manufacturer's product information and drawings have been included in Appendix A.

Estimated Project Costs

The total estimated cost for the construction of the lift station and RFS would be \$250,000.00. Application Attachment appendix A includes estimated costs for the RFS.

Anticipated Flows

Forty single family units and tree farm and horse boarding operations are intended to be served

by this facility. The single family units will account for a total of 50 EQRs and the other uses will account for two EQRs. Using the average daily flow of 70 gpcd, from CDPHE Policy 96-1, with 3.5 persons per EQR, the estimated average flow for this facility would be 12,740 GPD. Including a safety factor of 1.5 the maximum design flow would be 19,110 gallons/day or 0.02 MGD. At full build-out the hydraulic loading and organic loading are contemplated to be 0.02 MGD and 50 lbs/day, respectively.

Effluent Limitations

The Roaring Fork River in the vicinity of the proposed wastewater treatment facility, is classified for the following uses:

1. Aquatic Life, Cold 1
2. Recreation 1
3. Water Supply
4. Agriculture

To protect these uses, the Colorado Department of Health will determine a set of standards to apply to the proposed Blue Creek Ranch Treatment Facilities. Preliminary Effluent Limitations for the proposed treatment facility have been received from Ms. Karen Young, Colorado Department of Health and Environment, Colorado Water Quality Control Division. A copy of the Preliminary Effluent Limits, can be found in Application Attachment 5.

Instructions, Equipment Operation & Maintenance

Complete manuals and instructions for the operation and maintenance of all mechanical equipment for the treatment facility will be furnished by the individual equipment providers (Church & Associates, Inc., et al.) and stored within the facility. Adequate tools, training and technical assistance will also be provided by the contractor's representative to the operator and management agency representative.

Operation & Maintenance Requirements

Safety

Proper precautions shall be taken by the operator to avoid suffocation, exposure to infectious

diseases, electrical, mechanical, and chemical accidents.

General

The operator shall:

1. Have current Class D Wastewater and Class 1 Collections Certifications;
2. Check the operating conditions of the facility;
3. Make appropriate adjustments;
4. Perform other corrective measures and preventative maintenance as needed;
5. Document in writing all observations, changes, and adjustments made to the facility; and
6. Complete and submit required monitoring reports as required by Federal, State, and local regulatory agencies.
7. Inspect all solid collection tanks on an annual basis and schedule removal as necessary by a licenced contractor.

The staffing requirement for the facility is estimated at one operator checking on the facility two times a week.

Schedule

Table 2 presents an estimated development schedule for Blue Creek Ranch Lift Station and Wastewater Treatment Plant.

MANAGEMENT

Agency

Blue Creek Land Holdings, LLC shall assume management responsibility of the treatment facility until such time as the Blue Creek Ranch Homeowners Association has been formed.

Their address and telephone number is:

Mr. Robert Cumming, Jr.
c/o Blue Creek Land Holdings, LLC
19351 Highway 82
Carbondale, CO 81623
(970) 704-1165

Operator

A State Certified Operator will be responsible for the operation and maintenance of the facility. A contract will be negotiated and entered into with a qualified operator upon completion of the facility.

Finances

The initial facilities construction will be funded by Blue Creek Land Holdings, LLC. Operation and maintenance costs will be assessed by the Blue Creek Ranch Homeowners Association through fees collected from occupants of the development. The anticipated fees for the operation and maintenance of the facilities is \$40.73/EQR/month, see Table 3 attached to this report for further details. These assessments and fees will be included in the Covenants for the subdivision and will be submitted with the final facility drawings for CDPHE review.

SITE APPLICATION

**Part 1 - Application for Site Approval For Construction of: A New Domestic
Wastewater Treatment Plant.**

**Part 2 - Application for Site Approval For Construction of Expansion of: Lift Stations
and Interceptor Sewers.**

Colorado Department of Health
Water Quality Control Division
4300 Cherry Creek Drive South
Denver, CO 80246-1530

PART 1 - APPLICATION FOR SITE APPROVAL FOR CONSTRUCTION OF:
A NEW DOMESTIC WASTEWATER TREATMENT PLANT

Applicants Name and Address:

Blue Creek Ranch Subdivision
c/o Robert Cumming, Jr.
Blue Creek Land Holdings, LLC
19351 Highway 82
Carbondale, CO 81623
Phone: (970) 945-1165

Consulting Engineer's Name and Address:

Zancanella & Associates, Inc
P.O. Box 1908
Glenwood Springs, CO 81602
Phone: (970) 945-5700

A) Summary of Information Regarding new Sewage Treatment Plant:

- Proposed Location: (Legal Description) NW 1/4 SE 1/4 Sec 31
Twp. 7S Rng. 87W
Garfield County
- Type and capacity of Treatment Facility Proposed:
Processes Used: Recirculating Filter System (RFS)
Hydraulic: 0.02 MGD Organic: 50 lbs. BOD₅ / Day
Present PE: 0 Design PE: 182
%Domestic: 100 %Industrial: 0

3. Location of Facility:

Attach a map of the area which includes the following:

- (a) 5-Mile Radius: All Sewage Treatment Plants, Lift Stations, and Domestic Water Supply Intakes. (See Application Attachment 1)
- (b) 1-Mile Radius: Habitable Buildings, Location of Potable Water Wells, and an Approximate Indication of Topography. (See Application Attachments 2 & 3)

4. Effluent Disposal:

Surface discharge to watercourse: Roaring Fork River

State water quality classification of receiving watercourse:
Aquatic Life, Cold 1, Recreation 1, Water Supply, Agriculture

Subsurface: n/a Land: n/a
Evaporation: n/a Other: n/a

Proposed Effluent Limitations developed in conjunction with Planning and Standards Section, WQCD:
Awaiting response from CDPHE on Preliminary Effluent Limitations (see Application Attachment 5)

BOD ₅ : <u>45/30</u>	TSS: <u>45/30</u>
Fecal Coliform: <u>12,000/6,000</u>	Total Residual Chlorine: <u>0.5</u>
Ammonia: <u>n/a</u>	Other: <u>n/a</u>

5. Will a state or federal grant be sought to finance any portion of this project? No

6. Present Zoning of the site area: Agriculture/Residential/Rural/Density
Zoning within a 1 mile radius of site: Residential, Agricultural, PUD, Commercial

7. What is the distance downstream from the discharge to the nearest domestic water supply intake?
Approximately 17 Miles

Name of Supply: Glenwood Springs Pump Station
Address of Supply: 401 W 7, Glenwood Springs, CO 81601

What is the distance downstream from the nearest point of diversion?: 1700 feet

Name of User: Ranch at Roaring Fork
Address of User: 14913 Hwy 82, Carbondale, CO 81623

8. Who has the responsibility for operating the proposed facility?: Blue Creek Ranch Home Owners Association

9. Who owns the land upon which the facility will be constructed?: Blue Creek Land Holdings, LLC
Attach documents that create the authority for the Applicant to construct the proposed facility.
(See Application Attachment 6)

10. Estimated Project Cost: \$250,000.00 (lift station and RFS)

Who is financially responsible for the construction and operation of the facility?
Blue creek Land Holdings, LLC (See Application Attachment 6)

11. Names and Addresses of all water and/or sanitation districts within a 5 mile radius downstream of the proposed Waste Water Treatment Facility Site:

Carbondale Sanitation District, Town of Carbondale, 76 S. 2nd Street., Carbondale, CO 81623

12. Is the facility in a 100 year flood plain of other natural hazard area: No
If so, what precautions are being taken? n/a

Has the flood plain been designated by the Colorado Water Conservation Board, Department of Natural Resources, or other Agency?: Yes

If so, what is that designation? Area between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (See Application Attachment 4)

Name of Agency: Federal Emergency Management Agency - Administered by CWCB, Bryan Hyde

13. Please include all additional factors that might help the Water Quality Control Division make an informed decision on your application for Site Approval:

This will be a new facility which will provide local services to the Blue Creek Ranch Subdivision.

**PART 2 - APPLICATION FOR SITE APPROVAL FOR CONSTRUCTION OR EXPANSION
OF: LIFT STATIONS AND INTERCEPTOR SEWERS**

Applicants Name and Address:

Blue Creek Ranch Subdivision
c/o Robert Cumming, Jr.
Blue Creek Land Holdings, LLC
19351 Highway 82
Carbondale, CO 81623
Phone: (970) 945-1165

Consulting Engineer's Name and Address:

Zancanella & Associates, Inc
P.O. Box 1908
Glenwood Springs, CO 81602
Phone: (970) 945-5700

A) Summary of Information Regarding new Sewage Treatment Plant:

1. Proposed Location: (Legal Description) NW 1/4 SE 1/4 Sec 31
Twp. 7S Rng. 87W
Garfield County
2. Type and capacity of facility proposed: Lift Station & Force Main X Interceptor Sewer _____
Average Hydraulic: 13,000 gal/day Peak Hydraulic: 20,000 gal/day
Organic: 50 lbs. BOD₅/day
Present PE: 0 Design PE: 182 % Domestic: 100 % Industrial: 0
3. Location of Facility:
Attach a map of the area, which includes the following:
1-mile radius: habitable buildings, topography, and neighboring land uses.
(See Application Attachments 2 & 3)
4. Will a State or Federal grant/loan be sought to finance any portion of this project? No
5. Present zoning of site area? Agricultural, Residential, Rural, Density
Zoning within a 1-mile radius of site? Residential, Agricultural, PUD, Commercial
6. What entity has the responsibility for operating the proposed facility? Blue Creek Ranch Homeowners Association.
7. Who owns the land upon which the facility will be constructed? Blue Creek Land Holdings, LLC.
(See Application Attachment 6)
8. Estimated project cost: \$250,000 (Lift station and RFS)
Who is financially responsible for the construction and operation of the facility? Blue Creek Land Holdings, LLC. (See Application Attachment 6)
9. Is the facility in a 100-year flood plain or other natural hazard area? No
If so, what precautions are being taken? n/a
Has the flood plain been designated by the Colorado Water Conservation Board, Department of Natural Resources or other agency? Yes
Federal Emergency Management Agency - Administered by CWCB, Bryan Hyde
(Agency Name)
If so, what is that designation? Area between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (See Application Attachment 4)

10. Please include any additional factors that might help the Water Quality Control Division make an informed decision on your application for site approval.

This will be a new facility which will provide local services to the Blue Creek Ranch Subdivision in conjunction with the RFS proposed in Part 1 of this application.

11. The proposed lift station or interceptor sewer, when fully developed, will generate the following additional load:

Peak Hydraulic (MGD): 0.02 P.E. to be served: 182


There will be no additional loading of the wastewater plant since this lift station is part of the waste treatment system.

12. Describe emergency system in case of lift station and/or power failure. The lift station will be designed with additional capacity to store up to 1 day of normal flows.

13. Name and address of wastewater treatment plant providing treatment: Same as Applicant

14. The proposed lift station or interceptor sewer, when fully developed, will increase the loading of the treatment plant to 100 % of hydraulic and 100 % of organic capacity and Blue Creek Ranch Homeowners Association agrees to treat this wastewater? Yes No

6/7/01
(Date)

 Member
(Signature and Title)

B) Federal or State Ownership or Management:


If the Facility will be located on or adjacent to a site that is owned or managed by a Federal or State Agency, send the Agency a copy of this Application. n/a

C) Recommendation of Governmental Authorities:

Please address the following issues in your recommendation decision. Are the proposed facilities consistent with the Comprehensive Plan and any other plans for the area, including the 201 Facility Plan or 208 Water Quality Management Plan, as they affect water quality? If you have any further comments or questions, please call 320-8333, extension 5272.

DATE	RECOMMEND APPROVAL	RECOMMEND DISAPPROVAL	NO COMMENT	SIGNATURE OF REPRESENTATIVE
1. 6/7/01	X			 Blue Creek Land Holdings LLC
2.				Local Government: Town of Carbondale
3.				Sanitation District: Carbondale Sanitation District
4.				Sanitation District: Mid Valley Metropolitan District
5.				Garfield Co. Board of Commissioners
6.				Garfield Co. Health Authority
7.				Garfield Co. Planning Authority
8.				NWCOG

I certify that I am familiar with the requirements of the "Regulations for Site Applications Process", and have posted the site in accordance with the regulations. An Engineering Report, as described by regulations, has been prepared and is enclosed.

Applicant Signature:  Date: 6/7/01
Applicant Name: Robert Cumming, Jr. (Typed)

SITE APPLICATION ATTACHMENTS

Application Attachment 1

Figure 1 - 5 Mile Radius Map

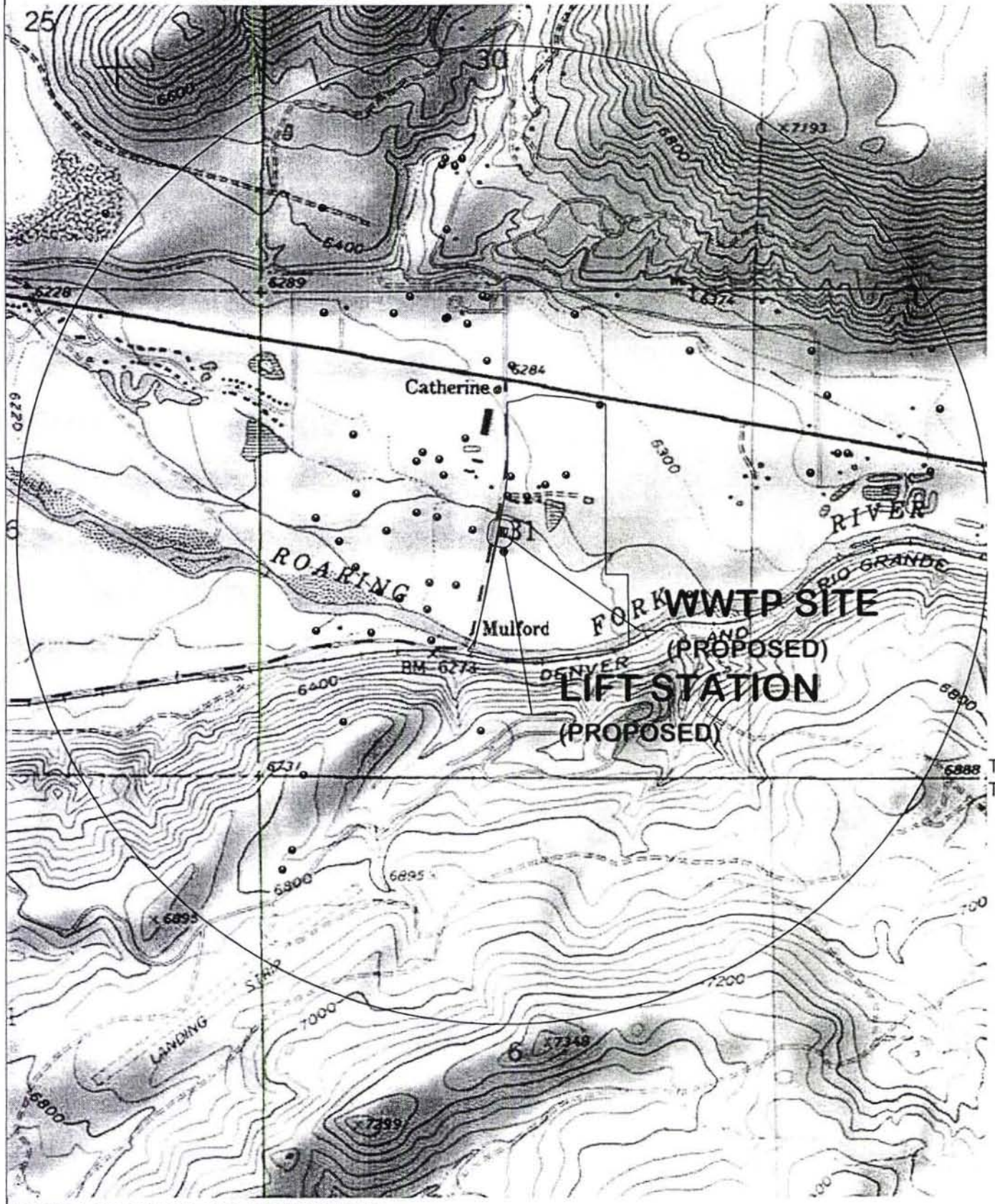
List of Sewer Treatment Plants
Lift Stations
Municipal Water Supply Well

Application Attachment 2

Figure 2 - 1 Mile Radius Map

Habitual Buildings
Location of Potable Wells
Topography

R.88W. R.87W.



NOTE: LOCATIONS ARE APPROXIMATE

WELL LOCATION					BLUE CREEK RANCH	FIGURE NO.
1-Mile Radius from WWTP						2
SCALE: 1" = 1500'	DATE: APRIL 17, 2001	SHEET: 2 OF 4		ZANCANELLA AND ASSOCIATES, INC. ENGINEERING CONSULTANTS POST OFFICE BOX 1908 - 1005 COOPER AVENUE GLENWOOD SPRINGS, COLORADO 81602 (970) 945-5700		
DRAWN BY: DNM	CHKD BY: DNM	APPD BY: TAZ	DRAWING: BC_base2.dwg			

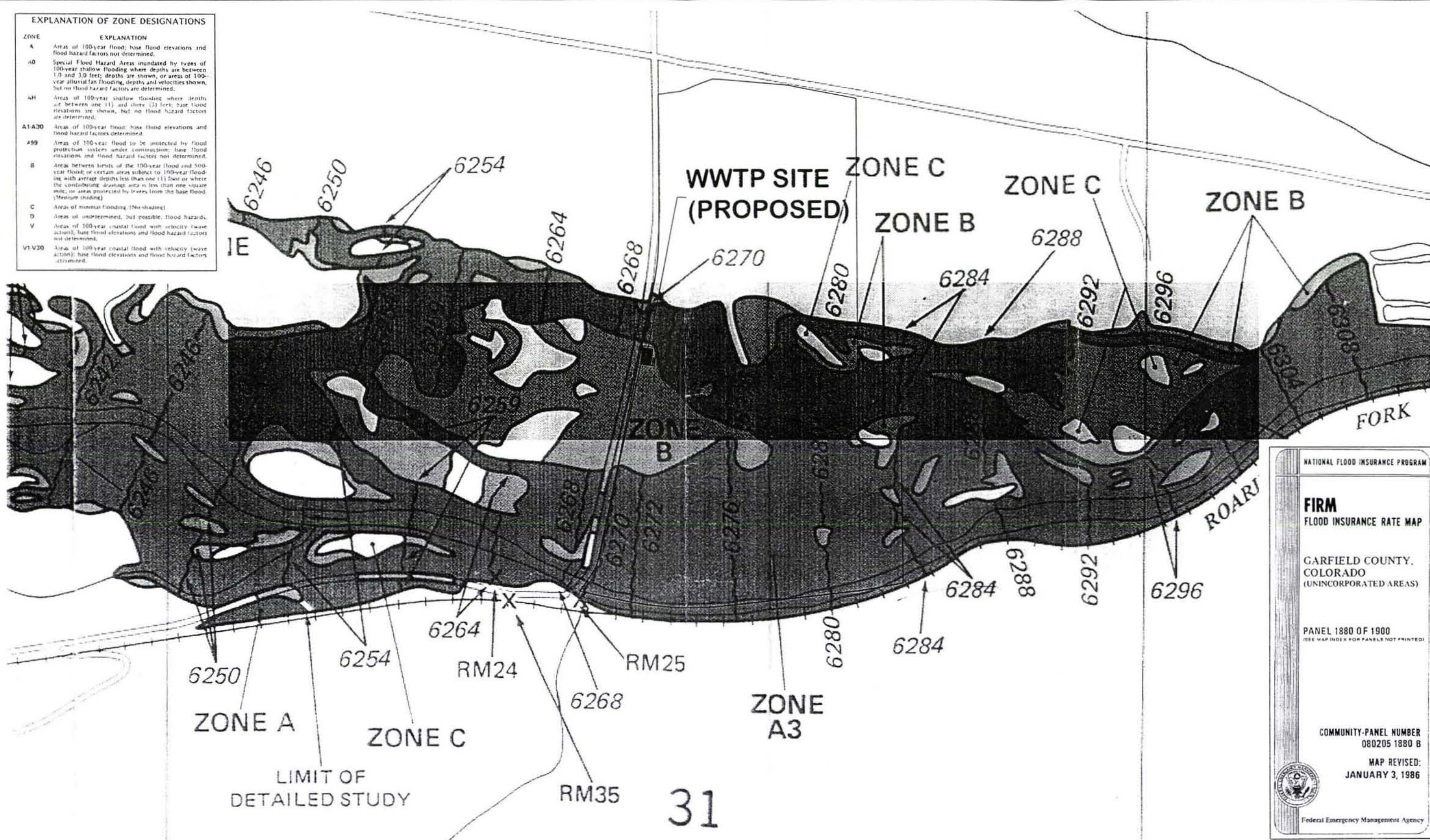
Application Attachment 3

Wells Located within a 1-Mile Radius

WELLS WITHIN 1 MILE OF BLUE CREEK RANCH PROPOSED WWTP
FROM SEO TABULATION, GARFIELD COUNTY GIS, ETC..

#	ID	WRNAME	WRSTRNAME	Q10	Q40	Q160	SEC	TS	RNG	PM	HNUMBER	DCRAMT	CANO	COMMENT
1	5620	OSCAR CERISE WELL 3	ROARING FORK RIVER	SW	NE	31	7	S	87	W	S	12418	0.033	W 890
2	6305	MIDDLE DITCH WELL	BLUE CREEK	SW	NW	32	7	S	87	W	S	12526	1.76	W 197
3	5621	OSCAR CERISE WELL 4	ROARING FORK RIVER	SW	NE	31	7	S	87	W	S	12784	0.033	W 890
4	5160	AGUA FRIA NO UNO WELL	ROARING FORK RIVER	SE	NW	32	7	S	87	W	S	38715	0.033	W 2818
5	5116	LIONS RIDGE WELL NO 2	ROARING FORK RIVER	NW	NW	31	7	S	87	W	S	39291	0.1	82 447
6	5946	ALTERNATE WELL NO 1 RF R	ROARING FORK RIVER	NE	NW	31	7	S	87	W	S	39291	0.1	79 36
7	5946	ALTERNATE WELL NO 1 RF R	ROARING FORK RIVER	NE	NW	31	7	S	87	W	S	39291	0.1	82 447
8	6293	LIONS RIDGE WELL NO 3	ROARING FORK RIVER	NW	NW	31	7	S	87	W	S	39291	0.1	87 153
9	6086	DELORES WELL	FRYINGPAN RIVER	SW	SE	25	7	S	88	W	S	39291	0.067	87 155
10	5245	CATHERINE STORE WELL	ROARING FORK RIVER	NE	NW	31	7	S	87	W	S	39870	0.0073	W 590
11	5481	JANNEY WELL NO 1	ROARING FORK RIVER	SE	NW	31	7	S	87	W	S	40698	0.11	W 1118
12	5821	T O WELL	ROARING FORK RIVER	NW	SW	31	7	S	87	W	S	40698	0.11	W 849
13	5619	OSCAR CERISE WELL 2	ROARING FORK RIVER	SW	NW	32	7	S	87	W	S	41049	0.033	W 890
14	5927	BLUE WELL	ROARING FORK RIVER	NW	SW	30	7	S	87	W	S	41150	0.033	82 44
15	5541	LUCKS WELL	ROARING FORK RIVER	SE	SE	32	7	S	87	W	S	42368	0.033	W 919
16	5389	GARFIELD COMPANY W NO 1	ROARING FORK RIVER	NE	SE	31	7	S	87	W	S	42977	0.11	W 323
17	5398	GENES WELL	ROARING FORK RIVER	SE	NW	29	7	S	87	W	S	43358	0.022	79 383
18	5618	OSCAR CERISE WELL 1	ROARING FORK RIVER	SW	NW	32	7	S	87	W	S	43673	0.033	W 890
19	5833	TIERACK WELL	ROARING FORK RIVER	NE	NW	31	7	S	87	W	S	44180	0.088	W 1318
20	5685	ROARING FORK BAP CH W 1	ROARING FORK RIVER	NW	NW	32	7	S	87	W	S	44925.44639	0.033	W 1831
21	5631	OLEARY WELL NO 1	ROARING FORK RIVER	NE	NE	25	7	S	88	W	S	46118	0.033	81 137
22	5509	LAEL E HUGHES WELL NO 2	ROARING FORK RIVER	SW	NE	31	7	S	87	W	S	47481.4669	0.363	80 249
23	5509	LAEL E HUGHES WELL NO 2	ROARING FORK RIVER	SW	NE	31	7	S	87	W	S	47481.4669	0.133	80 249
24	5058	TACKER WELL	ROARING FORK RIVER	SE	NE	30	7	S	87	W	S	47847.40329	0.055	81 498
25	5058	TACKER WELL	ROARING FORK RIVER	SE	NE	30	7	S	87	W	S	47847.40329	0.055	81 498
26	5058	TACKER WELL	ROARING FORK RIVER	SE	NE	30	7	S	87	W	S	47847.40329	0.055	84 238
27	5143	SKINNER WELL NO 1	ROARING FORK RIVER	NE	SE	36	7	S	88	W	S	47847.47607	0.616	81 407
28	6140	BLUE SPRING WELL	ROARING FORK RIVER	SW	NE	30	7	S	87	W	S	48212.3141	0.143	86 79
29	6140	BLUE SPRING WELL	ROARING FORK RIVER	SW	NE	30	7	S	87	W	S	48212.3141	0.033	86 79
30	6119	PATTON WELL NO 1	ROARING FORK RIVER	SE	SW	32	7	S	87	W	S	49273	0.033	84 385
31	6120	PATTON WELL NO 2	ROARING FORK RIVER	SE	SW	32	7	S	87	W	S	49273	0.033	84 385
32	6121	PATTON WELL NO 3	ROARING FORK RIVER	NW	NE	32	7	S	87	W	S	49273	0.033	84 385
33	6169	OXENBERG WELL NO 1	ROARING FORK RIVER	SE	NE	32	7	S	87	W	S	49673.49256	0.033	86 111
34	6406	SUNNYSIDE INDUSTRIAL W 1	ROARING FORK RIVER	NE	SW	25	7	S	88	W	S	50337	1	87 365
35		SI FINNBAR FARMS LOT 1	ROARING FORK RIVER			31	7	S	87	W	S			
36		SI FINNBAR FARMS LOT 2	ROARING FORK RIVER			31	7	S	87	W	S			
37		SI FINNBAR FARMS LOT 3	ROARING FORK RIVER			31	7	S	87	W	S			
38		SI FINNBAR FARMS LOT 4	ROARING FORK RIVER			31	7	S	87	W	S			
39		SI FINNBAR FARMS LOT 5	ROARING FORK RIVER			31	7	S	87	W	S			
40		SI FINNBAR FARMS LOT 6	ROARING FORK RIVER			31	7	S	87	W	S			
41		SI FINNBAR FARMS LOT 7	ROARING FORK RIVER			31	7	S	87	W	S			
42		SI FINNBAR FARMS LOT 8	ROARING FORK RIVER			31	7	S	87	W	S			
43		SI FINNBAR FARMS LOT 9	ROARING FORK RIVER			31	7	S	87	W	S			
44		SI FINNBAR FARMS LOT 10	ROARING FORK RIVER			31	7	S	87	W	S			
45		SI FINNBAR FARMS LOT 11	ROARING FORK RIVER			31	7	S	87	W	S			
46		SI FINNBAR FARMS LOT 12	ROARING FORK RIVER			31	7	S	87	W	S			
47		SI FINNBAR FARMS LOT 13	ROARING FORK RIVER			31	7	S	87	W	S			
48		PINTO WELL	ROARING FORK RIVER			31	7	S	87	W	S			ASPEN EQUESTRIAN ESTATES
49		APPOLOSA WELL	ROARING FORK RIVER			31	7	S	87	W	S			ASPEN EQUESTRIAN ESTATES
50		ARABIAN WELL	ROARING FORK RIVER			31	7	S	87	W	S			ASPEN EQUESTRIAN ESTATES
51		DUCK WELL	ROARING FORK RIVER			31	7	S	87	W	S			BLUE CREEK RANCH
52		SNIPE WELL	ROARING FORK RIVER			31	7	S	87	W	S			BLUE CREEK RANCH
53		GOOSE WELL	ROARING FORK RIVER			31	7	S	87	W	S			BLUE CREEK RANCH
54		TO RANCH WELL #1A	ROARING FORK RIVER			31	7	S	87	W	S			TO RANCH
55		TO RANCH WELL #2	ROARING FORK RIVER			31	7	S	87	W	S			TO RANCH
56		TO RANCH WELL #3	ROARING FORK RIVER			31	7	S	87	W	S			TO RANCH

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AD	Special Flood Hazard Areas inundated by types of 100-year shallow flooding where depths are between 1.0 and 3.0 feet; depths are shown, or areas of 100-year alluvial fan flooding, depths and velocities shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1A20	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection systems under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1V20	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

GARFIELD COUNTY,
COLORADO
(UNINCORPORATED AREAS)

PANEL 1880 OF 1900
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
080205 1880 B

MAP REVISED:
JANUARY 3, 1986

Federal Emergency Management Agency

REV. NO.	DATE	REVISION	MADE BY	CHKD BY	APPD BY

FEMA AREA FLOOD PLAIN MAP

SCALE: 1" = 500'

DATE: APR. 17, 2001

SHEET: 4 OF 4

DRAWN BY: DNM CHKD BY: DNM APPD BY: TAZ DRAWING: BC_base2.dwg

BLUE CREEK RANCH

ZANCANELLA AND ASSOCIATES, INC.
ENGINEERING CONSULTANTS
POST OFFICE BOX 1908 - 1005 COOPER AVENUE
GLENWOOD SPRINGS, COLORADO 81602 (970) 945-5700

FIGURE NO. **4**

PROJECT: 20729

HP Geotech

Hepworth-Pawlak Geotechnical, Inc.
5020 County Road 154
Glenwood Springs, Colorado 81601
Phone: 970-945-7988

Fax: 970-945-8454
hpgeo@hpgeotech.com

May 30, 2001

Zancanella Associates
Attn: Dan Mathes
P.O. Box 1908
Glenwood Springs, Colorado 81602

Job No. 100 601

Subject: Proposed Waste Water Treatment Plant, Blue Creek Ranch, County Road
100, Garfield County, Colorado

Dear Mr. Mathes:


Attached is a copy of our preliminary geotechnical study for the proposed Blue Creek Ranch Development, Job No. 100 601, dated September 11, 2001.

The recommendations contained in the report should be adequate for planning and preliminary design of the proposed waste water treatment plant. We recommend that a site specific subsoil study be performed prior to final design.

If you have any questions or if we can be of further assistance, please call our office.

Sincerely,

HEPWORTH - PAWLAK GEOTECHNICAL, INC.


Daniel E. Hardin, P.E.

DEH/ksw





Hepworth-Pawlak Geotechnical, Inc.
5020 County Road 154
Glenwood Springs, Colorado 81601
Phone: 970-945-7988

Fax: 970-945-8454
hpgeo@hpgeotech.com

PRELIMINARY GEOTECHNICAL STUDY
PROPOSED BLUE CREEK RANCH SUBDIVISION
HIGHWAY 82 AND COUNTY ROAD 100
GARFIELD COUNTY, COLORADO

JOB NO. 100 601

SEPTEMBER 11, 2000

PREPARED FOR:

WINDRIVER HOLDINGS, LLC
ATTN: ROBERT M. CUMMING, JR.
19351 HIGHWAY 82
CARBONDALE, COLORADO 81623

HEPWORTH - PAWLAK GEOTECHNICAL, INC.

September 11, 2000

WindRiver Holdings, LLC
Attn: Robert M. Cumming Jr.
19351 Highway 82
Carbondale, Colorado 81623

Job No.100 601

Subject: Report Transmittal, Preliminary Geotechnical Study, Proposed Blue
Creek Ranch Subdivision, Highway 82 and County Road 100, Garfield
County, Colorado.

Dear Mr. Cumming:

As requested, we have conducted a preliminary geotechnical study for the proposed residential subdivision at Blue Creek Ranch.

The property is suitable for the proposed development based on geologic and geotechnical conditions.

Subsurface conditions encountered in the exploratory pits excavated throughout the property consist of ½ to 1 foot of topsoil overlying up to 3½ feet of soft to medium stiff sandy silty clay and loose silty clayey sand. Below depths of 1½ to 4 feet, dense sandy gravel with cobbles and boulders was encountered. Groundwater was typically encountered between 1½ and 4 feet in the northern part of the property.

Spread footings placed on the natural gravel subsoils or compacted structural fill and designed for an allowable bearing pressure of 3,000 psf appear suitable for building support. Foundations should be kept shallow to avoid groundwater impacts. The infiltration septic disposal systems should be engineered for the site specific groundwater and soil conditions.

The report which follows describes our exploration, summarizes our findings, and presents our recommendations suitable for planning and preliminary design. It is important that we provide consultation during design, and field services during construction to review and monitor the implementation of the geotechnical recommendations.

If you have any questions regarding this report, please contact us.

Sincerely,

HEPWORTH - PAWLAK GEOTECHNICAL, INC.



Steven L. Pawlak, P.E.

SLP/ksw

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PURPOSE AND SCOPE OF STUDY

This report presents the results of a preliminary geotechnical study for the proposed residential subdivision at Blue Creek Ranch located north of the Roaring Fork River and east of 100 Road, Garfield County, Colorado. The project site is shown on Fig. 1. The purpose of the study was to evaluate the geologic and subsurface conditions and their potential impacts on the project. The study was conducted in accordance with our agreement for professional services to WindRiver Holdings, LLC dated July 24, 2000.

A field exploration program consisting of a reconnaissance and exploratory pits was conducted to obtain information on the site and subsurface conditions. Samples of the subsoils obtained during the field exploration were tested in the laboratory to determine their classification, compressibility or swell characteristics and other engineering properties. Percolation testing was also performed to evaluate the feasibility of infiltration septic disposal systems. The results of the field exploration and laboratory testing were analyzed to develop recommendations for project planning and preliminary design. This report summarizes the data obtained during this study and presents our conclusions and recommendations based on the proposed development and subsurface conditions encountered.

PROPOSED DEVELOPMENT

At the time of this study development plans were in the conceptual stages. The development will be a single family residential project and tree farm. The existing ranch buildings will remain. The tree farm will be located on the high terrace in the northern part of the property. The tree farm will provide a buffer zone between the houses and Highway 82. Nineteen clustered building sites are planned on the upper terrace to the north of the existing ranch buildings. Twenty building sites on large lots are planned to the south of the existing ranch buildings. Private driveways will be used to provide access to the building sites and a dedicated road will provide access to County Road 100. We assume the residences will be typical of those in the area and be

two to three story buildings with slab-on-grade or shallow crawlspace. Extensive site grading will probably not be required for the type of development proposed. The development will have on-site wells and a packaged centralized sewer system.

SITE CONDITIONS

The Blue Creek Ranch subdivision is located in the Roaring Fork valley about three miles up stream from Carbondale. The property is located to the southeast of Catherine's Store, near the center of Section 31, T. 7 S., R. 87 W. The Roaring Fork River borders the property on the south. The general topography is shown on Fig. 1. The ground in the area consists of nearly level terraces to the north of the river. The terraces are from about 5 to 15 feet above the river. Ponds and several irrigation ditches are present on the property. Much of the property is irrigated pasture and hay fields. Outside the irrigated areas, vegetation consists of cottonwood trees, grass and brush. Wetlands are present in some of the lower lying parts of the property.

GEOLOGIC SETTING

Regional geology mapping shows that formation rock in the project area is the Pennsylvanian age Eagle Valley Evaporite (Kirkham and Widmann, 1997). Rock outcrops are not present on the property, but outcrops and shallow colluvium (Qc/Pee) are present on the valley to the south of the river. At the project site the Eagle Valley Evaporite is expected to lie below typical foundation excavations depths. The Eagle Valley Evaporite is a gray to tan gypsum, anhydrite and halite with interbedded siltstone, claystone, shale and dolomite. Bedding in the rock is usually complexly folded because of flow of the plastic evaporite. The gypsum, anhydrite and halite are soluble in fresh water. Subsurface voids and related sinkholes are sometimes present in areas where the Eagle Valley Evaporite is present near the ground surface. Evidence of sinkholes was not observed on the property.

Holocene and late Pleistocene alluvium deposited by the Roaring Fork River is present below the terrace on the property. The exploratory pits show that the alluvium typically consists of a thin upper sandy clay that is usually less than 3.5 feet thick. The

underlying alluvium is a dense deposit of rounded gravel, cobbles and boulders in a silty sand matrix. Four terrace levels are present on the property (Qt1 through Qt4). The lowest level represents abandoned river channels. The higher terraces represent former valley floor levels. Along this reach of the Roaring Fork River, the modern river channel transitions from a straight channel pattern up stream of the County Road 100 bridge to a braided channel pattern down stream of the bridge. The lower terraces to the north of the river at the project site show a relict braided stream pattern on the aerial photographs.

FIELD EXPLORATION

The field exploration for the project was conducted on July 28, 2000. Fourteen exploratory pits were excavated at the locations shown on Fig. 1 to evaluate the general subsurface conditions. The pits were dug with a rubber tired backhoe and were logged by a representative of Hepworth-Pawlak Geotechnical, Inc.

Samples of the subsoils were taken by relatively undisturbed and disturbed sampling methods. The undisturbed samples were obtained in the fine-grained soils by hand driven 2 inch diameter liners. The disturbed samples were obtained in the coarse granular soils. Depths at which the samples were taken are shown on the Logs of Exploratory Pits, Fig. 2. The samples were returned to our laboratory for review by the project engineer and testing.

SUBSURFACE CONDITIONS

Graphic logs of the subsurface conditions encountered at the site are shown on Fig. 2. The subsoils consist of about ½ to 1 foot of organic topsoil overlying up to about 3½ feet of soft to medium stiff sandy silty clay and loose silty clayey sand at Pit 8. Below depths from about ½ to 4 feet, relatively dense, slightly silty to silty sandy gravel and cobbles with boulders was encountered to the maximum depth explored of 5½ feet. Digging in the dense gravel with the light duty backhoe was difficult due to the cobbles and boulders.

Laboratory testing performed on samples obtained from the pits included natural moisture content and density and gradation analyses. Results of consolidation testing performed on relatively undisturbed samples of the clay and sand soils, shown on Figs. 4 - 6, indicate moderate to high compressibility under conditions of loading and wetting. Results of a gradation analyses performed on a disturbed bulk sample (minus 5 inch fraction) of the natural gravel with cobbles soils are shown on Fig. 7. The laboratory testing is summarized in Table I.

Free water was generally encountered in Pits 1 through 7 (located in the northern part of the property) at depths of about 1½ to 4 feet and in Pit 14 at a depth of 5 feet. The upper soils were moist to very moist.

GEOLOGIC SITE ASSESSMENT

There are several conditions of a geologic nature that should be considered in project planning and development. These conditions and their expected influence on the proposed development are discussed below.

FLOODING

The low lying ground along the river may be subject to occasional flooding by the Roaring Fork River. A hydrologist should evaluate the flood potential for the project. These evaluations should establish potential flood levels and the need for mitigation to protect proposed structures in the low lying parts of the site. The flood evaluations should also consider the possibility of river reoccupation of the abandoned channels and the possible need for river bank stabilization.

SINKHOLES

Evidence of sinkholes were not observed in the field or on the aerial photographs of the property. The sinkhole risk on the property is viewed to be low and no greater than that present in other parts of the Roaring Fork Valley where the evaporite is near the surface. The potential for shallow subsurface voids that could develop into sinkholes should be considered when planning site specific geotechnical studies at the building sites. If conditions indicative of sinkhole related problems are

encountered, the building site should be abandoned or the feasibility of mitigation evaluated. Mitigation measures could include:

- Stabilization by Grouting
- Stabilization by Excavation and Backfilling
- Deep Foundation Systems
- Structural Bridging
- Mat Foundations
- Set-back from the Sinkhole

Water features such as landscape ponds are not recommended near building sites unless evaluated on a site specific basis. Home owners should be advised of the sinkhole potential, since early detection of foundation distress and timely remedial actions are important in reducing the cost of remediation, should a sinkhole start to develop after construction.

EARTHQUAKE CONSIDERATIONS

The project area could experience moderately strong earthquake related ground shaking. Modified Mercalli Intensity VI ground shaking should be expected during a reasonable service life of the development, but the probability for stronger ground shaking is low. Intensity VI ground shaking is felt by most people and causes general alarm, but results in negligible damage to structures of good design and construction. Occupied structures should be designed to withstand moderately strong ground shaking with little or no damage and not to collapse under stronger ground shaking. The region is in the Uniform Building Code, Seismic Risk Zone 1. Based on our current understanding of the earthquake hazard in this part of Colorado, we see no reason to increase the commonly accepted seismic risk zone for the area.

RADIATION POTENTIAL

The project site is not located on geologic deposits that would be expected to have high concentrations of radioactive minerals. However, there is a potential that radon gas could be present in the area. It is difficult to assess future radon gas concentrations in buildings before the buildings are constructed. Testing for radon gas levels could be done when the residences and other occupied structures have been

completed. New buildings are often designed with provisions for ventilation of lower enclosed areas should post construction testing show unacceptable radon gas concentration.

PRELIMINARY DESIGN RECOMMENDATIONS

The conclusions and recommendations presented below are based on the proposed development, the site reconnaissance, subsurface conditions encountered in the exploratory pits, and our experience in the area. The recommendations are suitable for planning and preliminary design but site specific studies should be conducted for individual lot development.

FOUNDATIONS

Bearing conditions will vary depending on the specific location of the buildings on the property. The subsoils consist of compressible clay and sand soils overlying dense gravel soils. The clays and sands possess low bearing capacity and moderate to high settlement potential. The underlying gravels possess moderate bearing capacity and low settlement potential.

Based on the nature of the proposed construction, spread footings bearing on the natural gravel subsoils should be suitable for building support. We expect the footings can be sized for an allowable soil bearing pressure of 3,000 psf. The overlying fine grained soils may need to be removed to expose the underlying gravels and replaced with compacted structural fill. We can evaluate the feasibility of bearing on the upper fine- grained soils, such as with a lightly loaded monolithic slab foundation, as part of the site specific lot study. Foundation walls should be designed to span local anomalies and to resist lateral earth loadings when acting as retaining structures. The footings should have a minimum depth of 36 inches for frost protection.

BELOW GRADE CONSTRUCTION

Ground water level typically appears shallow throughout the project area. Field sprinkler and flood irrigation could be contributing to the shallow groundwater condition. Due to the shallow water level and flat lying terrain, it will probably not be practical to protect below grade areas from wetting and hydrostatic pressure buildup by use of an underdrain system. We recommend that slab-on-grade floors be placed near to above existing grade and crawlspaces be kept shallow, at least 2 feet above groundwater level. Basement levels may not be feasible. Potential groundwater impacts on proposed development should be evaluated as part of the site specific building study.

FLOOR SLABS

Slab-on-grade construction should be feasible for bearing on the natural soils below the topsoil. There could be some potential for slab settlement where there are compressible clay subgrade soils. To reduce the effects of some differential movement, non-structural floor slabs should be separated from all bearing walls and columns with expansion joints. Floor slab control joints should be used to reduce damage due to shrinkage cracking. A minimum 4 inch thick layer of free-draining gravel should underlie building slabs to break capillary water rise and facilitate drainage.

SURFACE DRAINAGE

The grading plan for the subdivision should consider runoff through the project and at individual sites. Water should not be allowed to pond next to buildings. Exterior backfill should be well compacted and have a positive slope away from the building for a distance of 10 feet. Roof downspouts and drains should discharge well beyond the limits of all backfill.

PAVEMENT SECTION

The near surface soils encountered in the pits below the topsoil consist of poor quality sandy silty clay and fair to good quality sandy gravel. We recommend the pavement section for the site access road consist of a minimum 3 inches of asphalt pavement on 8 inches of Class 6 aggregate base course for the sandy gravel subgrade condition. The subgrade should be evaluated for pavement support at the time of

construction. Subexcavation of the fine-grained soils and replacement with coarse gravel subbase material may be needed to achieve a stable subgrade.

PERCOLATION TESTING

Percolation tests were conducted on July 29, 2000 to evaluate the feasibility of infiltration septic disposal systems. One percolation hole was dug adjacent each of the 14 exploratory pits at the locations shown on Fig. 1. The test holes (nominal 12 inch diameter by 12 inch deep) were hand dug at the bottom of shallow backhoe pits and were soaked with water one day prior to testing. The soils exposed in the percolation holes are similar to those exposed in the exploratory pits shown on Fig. 2. The percolation test results are presented in Table II. The infiltration septic system disposal systems should be engineered for the site specific groundwater and soil conditions.

LIMITATIONS

This study has been conducted according to generally accepted geotechnical engineering principles and practices in this area at this time. We make no warranty either expressed or implied. The conclusions and recommendations submitted in this report are based upon the data obtained from the field reconnaissance, review of published geologic reports, the exploratory pits located as shown on Fig. 1 and to the depths shown on Fig. 2, the proposed type of construction and our experience in the area. Our findings include interpolation and extrapolation of the subsurface conditions identified at the exploratory pits and variations in the subsurface conditions may not become evident until excavation is performed. If conditions encountered during construction appear different from those described in this report, we should be notified so that re-evaluation of the recommendations may be made.

This report has been prepared for the exclusive use by our client for planning and preliminary design purposes. We are not responsible for technical interpretations by others of our information. As the project evolves, we should provide continued consultation, conduct additional evaluations and review and monitor the implementation of our recommendations. Significant design changes may require additional analysis or modifications to the recommendations presented herein. We recommend on-site

observation of excavations and foundation bearing strata and testing of structural fill by a representative of the geotechnical engineer.

Respectfully Submitted,

HEPWORTH - PAWLAK GEOTECHNICAL, INC.

Ralph G. Mock
Ralph G. Mock
Engineering Geologist

and by:

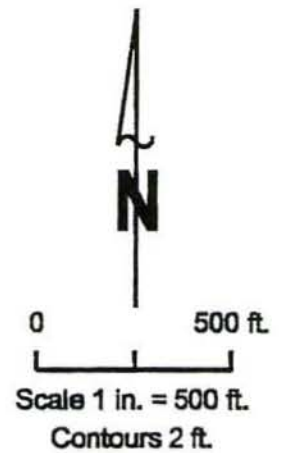
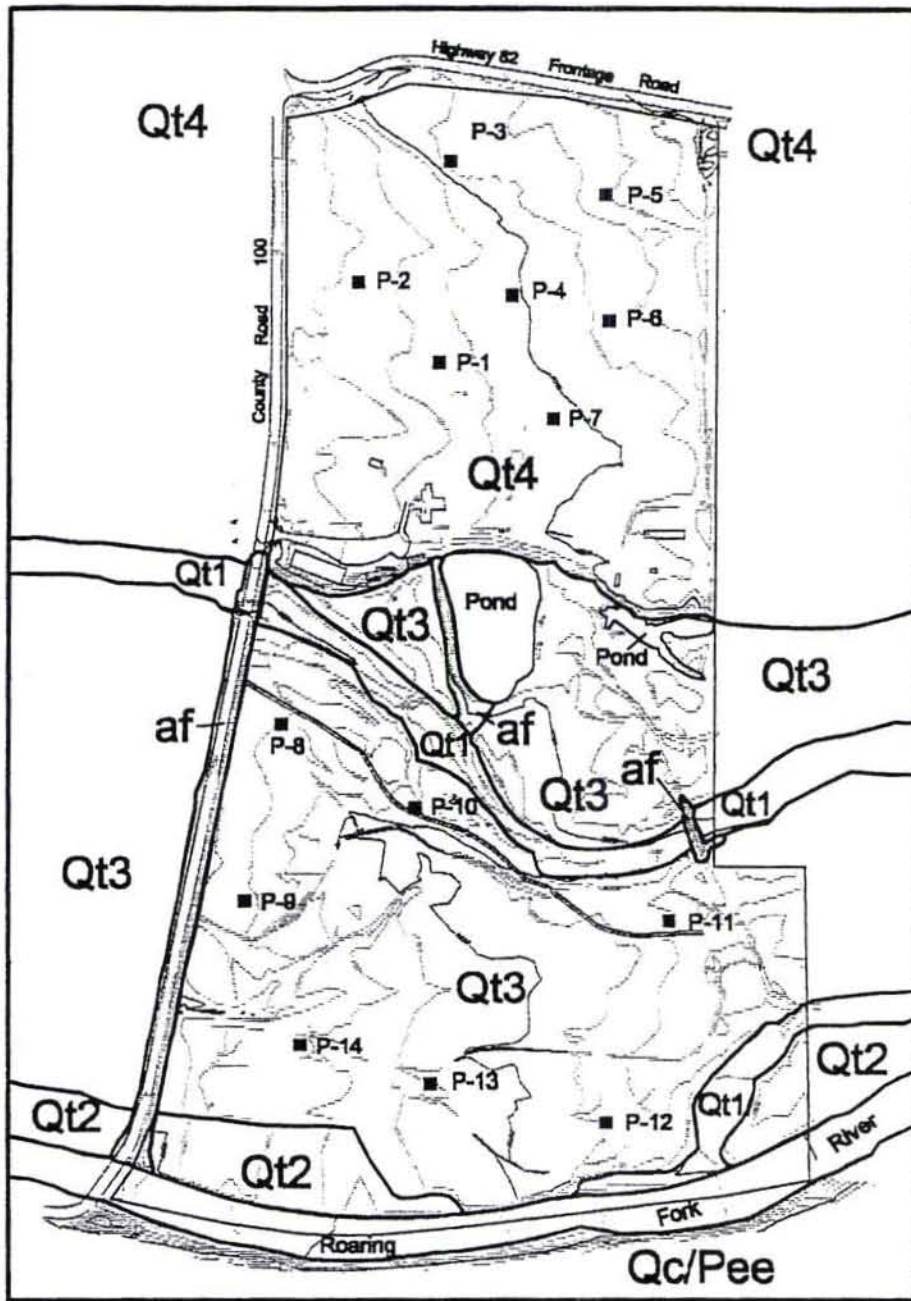
Steven L. Pawlak
Steven L. Pawlak, P.E.
15222
5/31/01
PROFESSIONAL ENGINEER
STATE OF COLORADO

SLP/ksw

cc: Sopris Engineering - Attn: Nancy Nichol
Design Workshop, Inc. - Attn: Sheri Sanzone
Davis Horn, Inc. - Attn: Glen Horn

REFERENCE

Kirkham, R.M. and Widmann, B.L., 1997, *Geology Map of the Carbondale Quadrangle, Garfield County, Colorado*, Colorado Geological Survey Open File 97-3.



EXPLANATION:

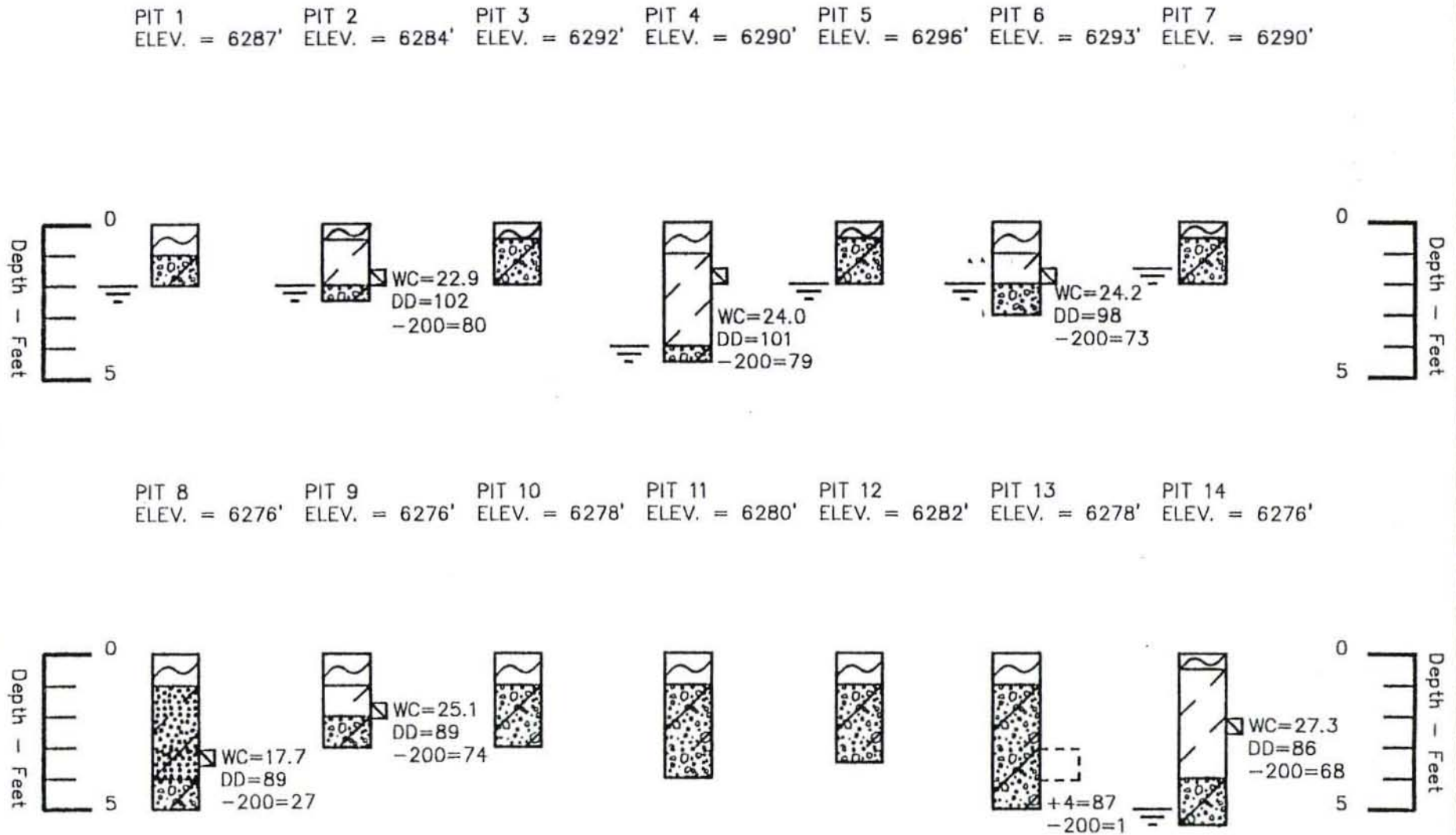
- | | |
|----------------------------------|------------------------------|
| af - Man-Placed Fill | Qt4 - High River Terrace |
| Qc - Colluvium | Pee - Eagle Valley Evaporite |
| Qt1 - Abandoned River Channels | —— Contact (approx.) |
| Qt2 - Low River Terrace | P-1 ■ Exploratory Pit |
| Qt3 - Intermediate River Terrace | |

100 601

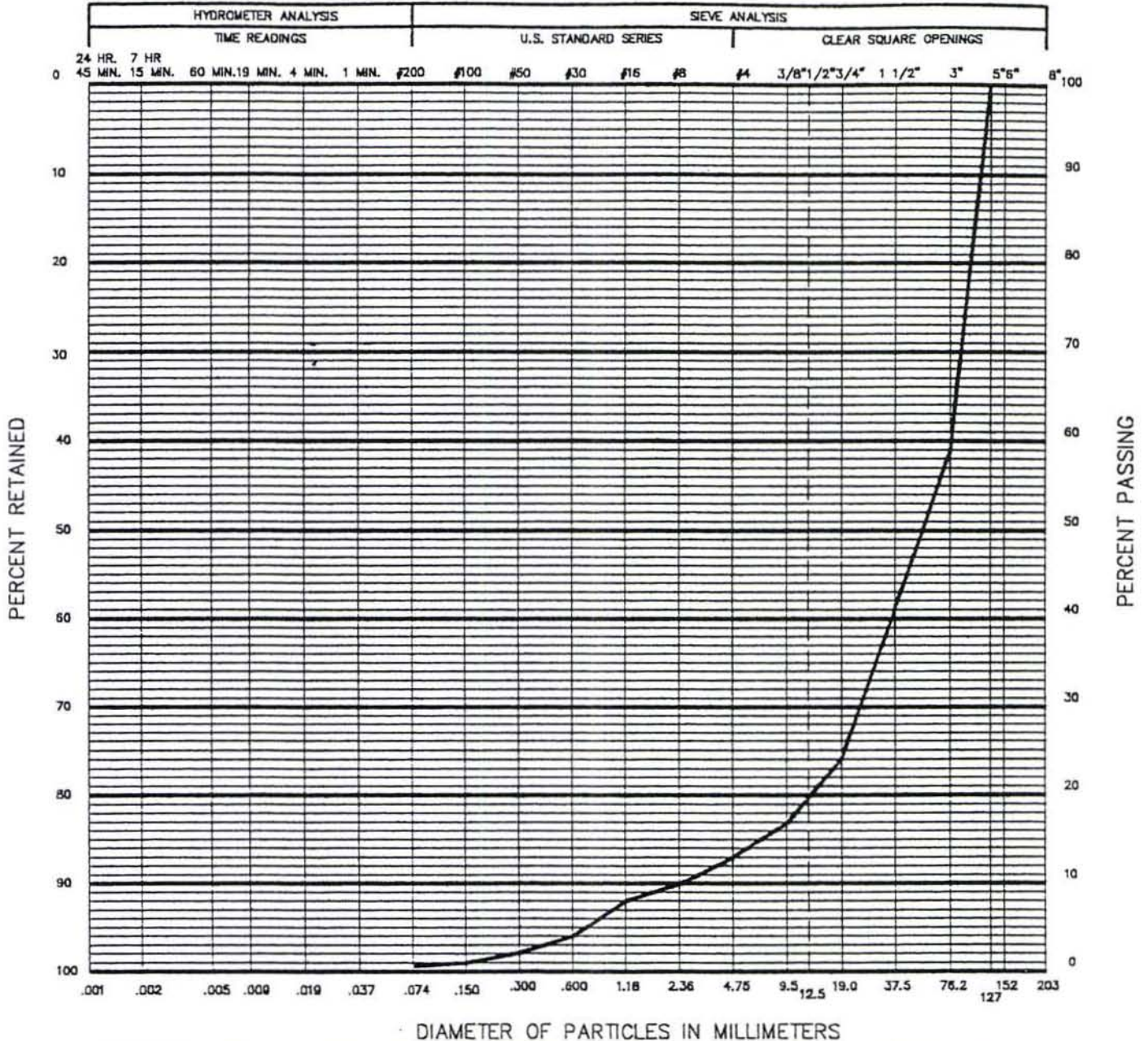
HEPWORTH - PAWLAK
GEOTECHNICAL, INC.

LOGS OF EXPLORATORY PITS

Fig. 2



Note: Explanation of symbols is shown on Fig. 3.



GRAVEL 87 % SAND 12 % SILT AND CLAY 1 %

LIQUID LIMIT % PLASTICITY INDEX %

SAMPLE OF: Sandy Gravel and Cobbles FROM: Pit 13 at 3 thru 4 Feet

LEGEND:



TOPSOIL; organic silty clay, soft, moist to very moist, dark brown.



CLAY (CL); silty, sandy, soft to medium stiff, very moist to wet, mixed brown, low plasticity.



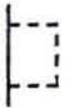
SAND (SM-SC); silty, clayey, loose, very moist, dark brown.



GRAVEL AND COBBLES (GM-GP); with boulders, sandy, slightly silty to silty, dense, moist to very moist with depth, mixed brown, rounded to subrounded rock.



2" Diameter hand driven liner sample.



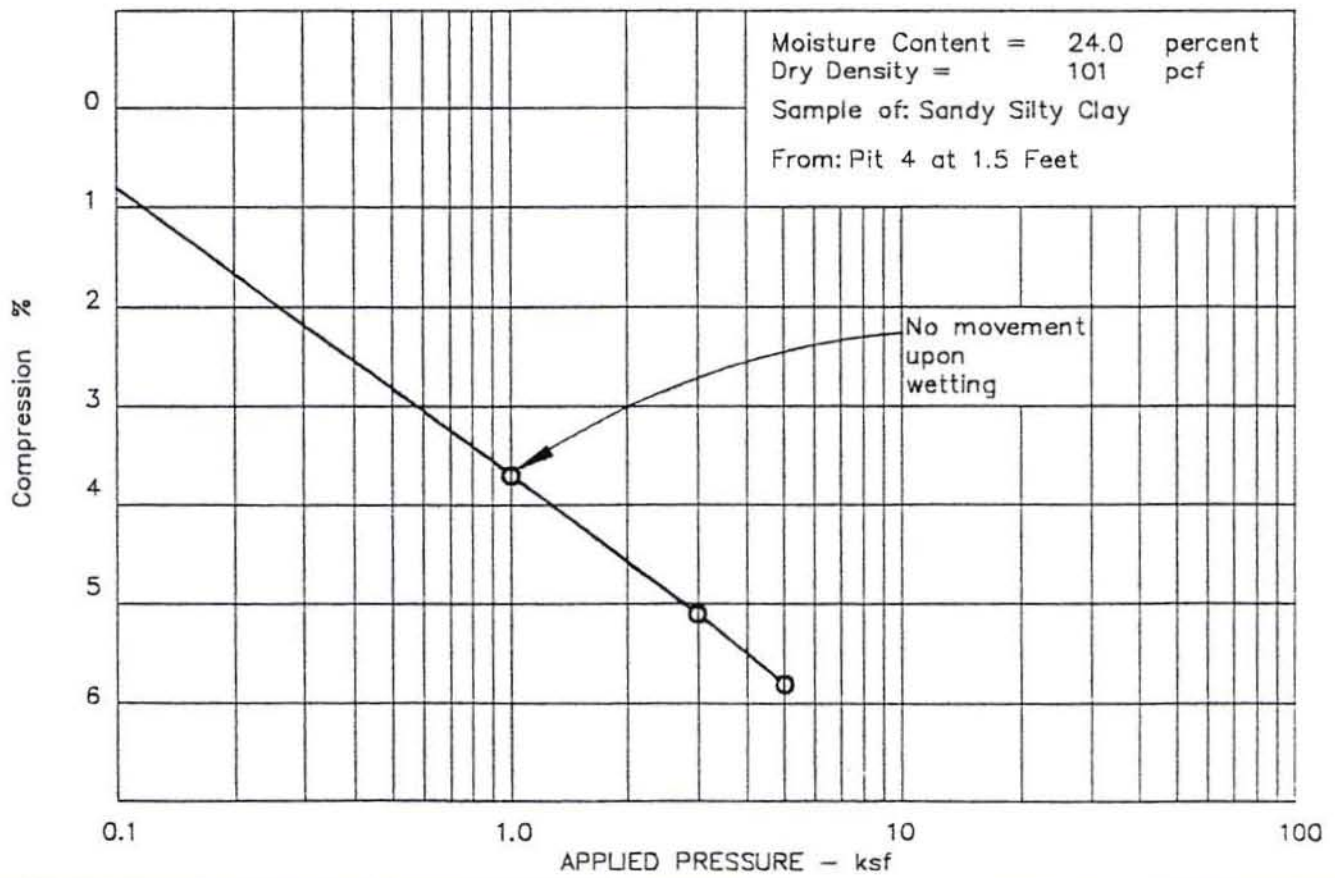
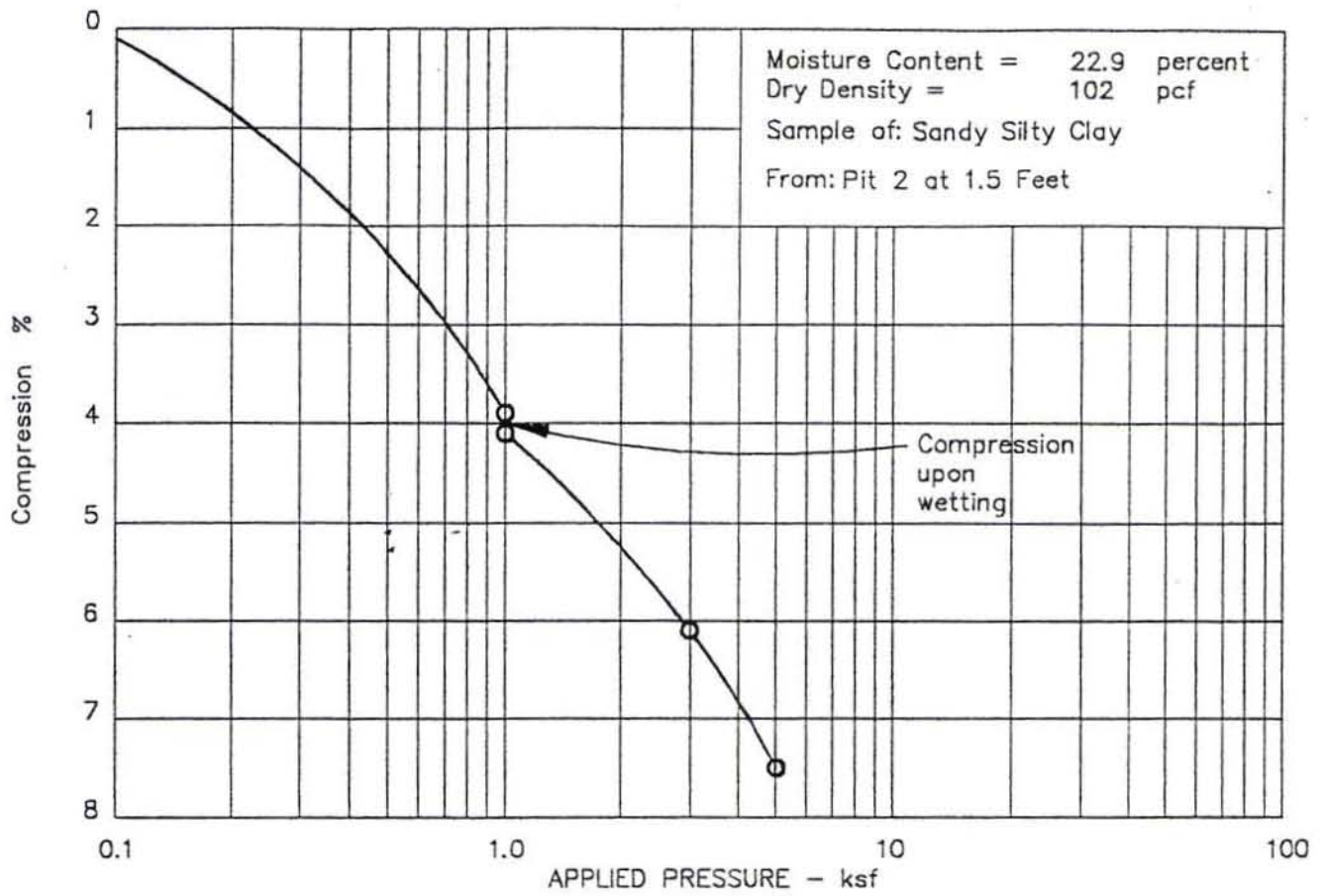
Disturbed bulk sample.

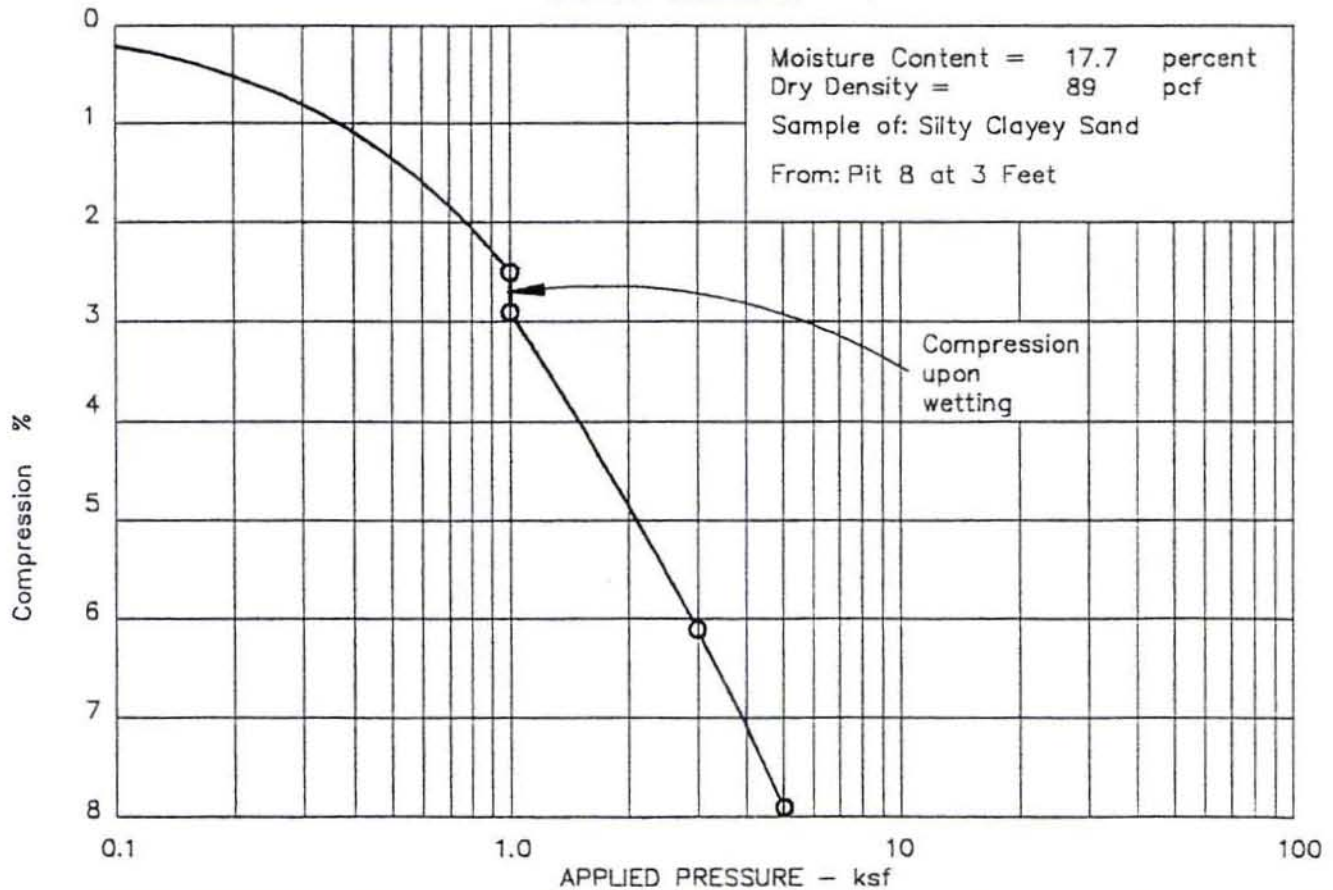
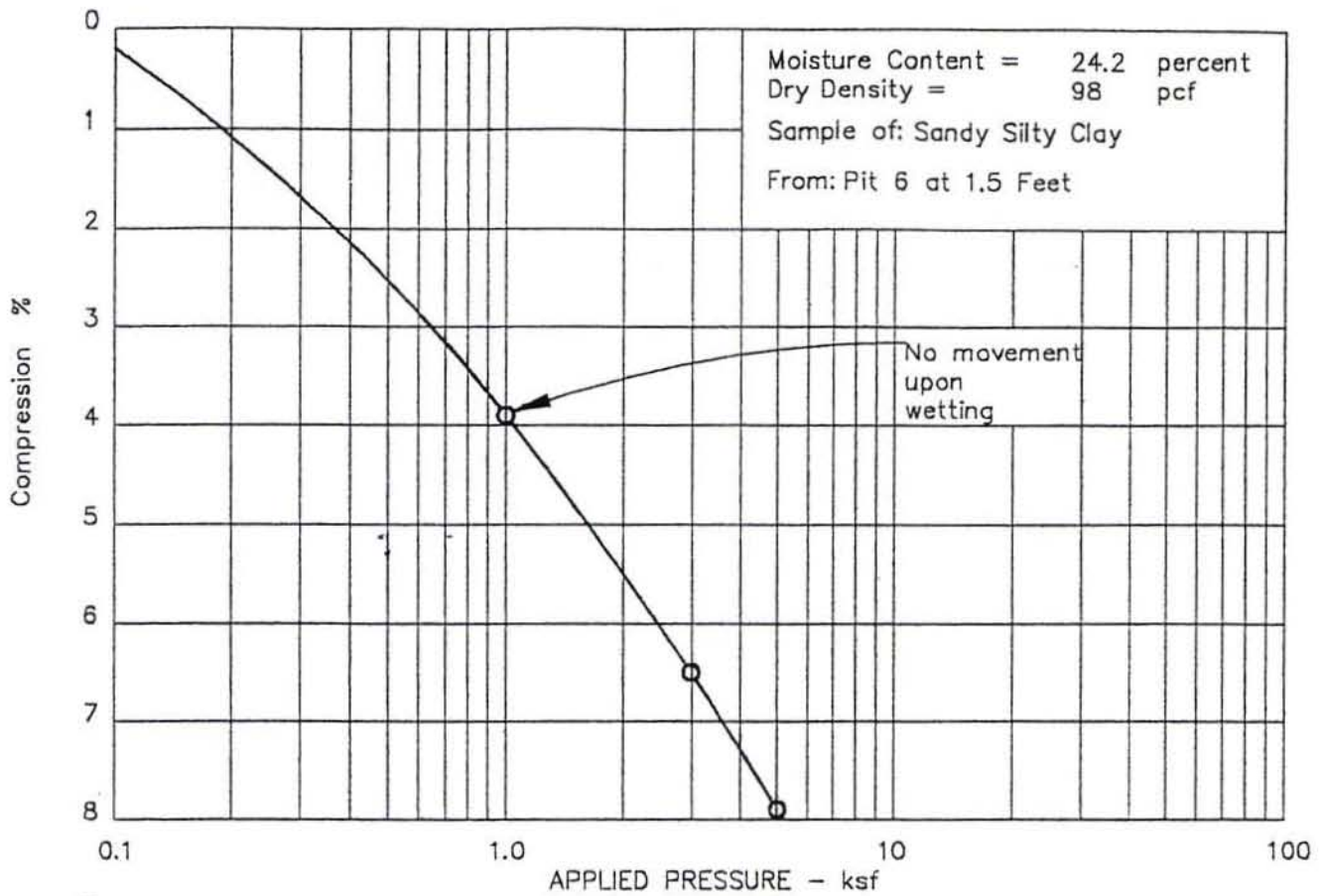


Free water level in pit at time of excavating.

NOTES:

1. Exploratory pits were excavated on July 28, 2000 with a backhoe.
2. Locations and elevations of exploratory pits were provided by Sopris Engineering. Pit logs are drawn to depth.
3. The exploratory pit locations and elevations should be considered accurate only to the degree implied by the method used.
4. The lines between materials shown on the exploratory pit logs represent the approximate boundaries between material types and transitions may be gradual.
5. Water level readings shown on the logs were made at the time and under the conditions indicated. No free water was encountered in Pits 3 and 8 thru 13. Fluctuations in water level may occur with time.
6. Laboratory Testing Results:
WC = Water Content (%)
DD = Dry Density (pcf)
+4 = Percent retained on No. 4 sieve
-200 = Percent passing No. 200 sieve





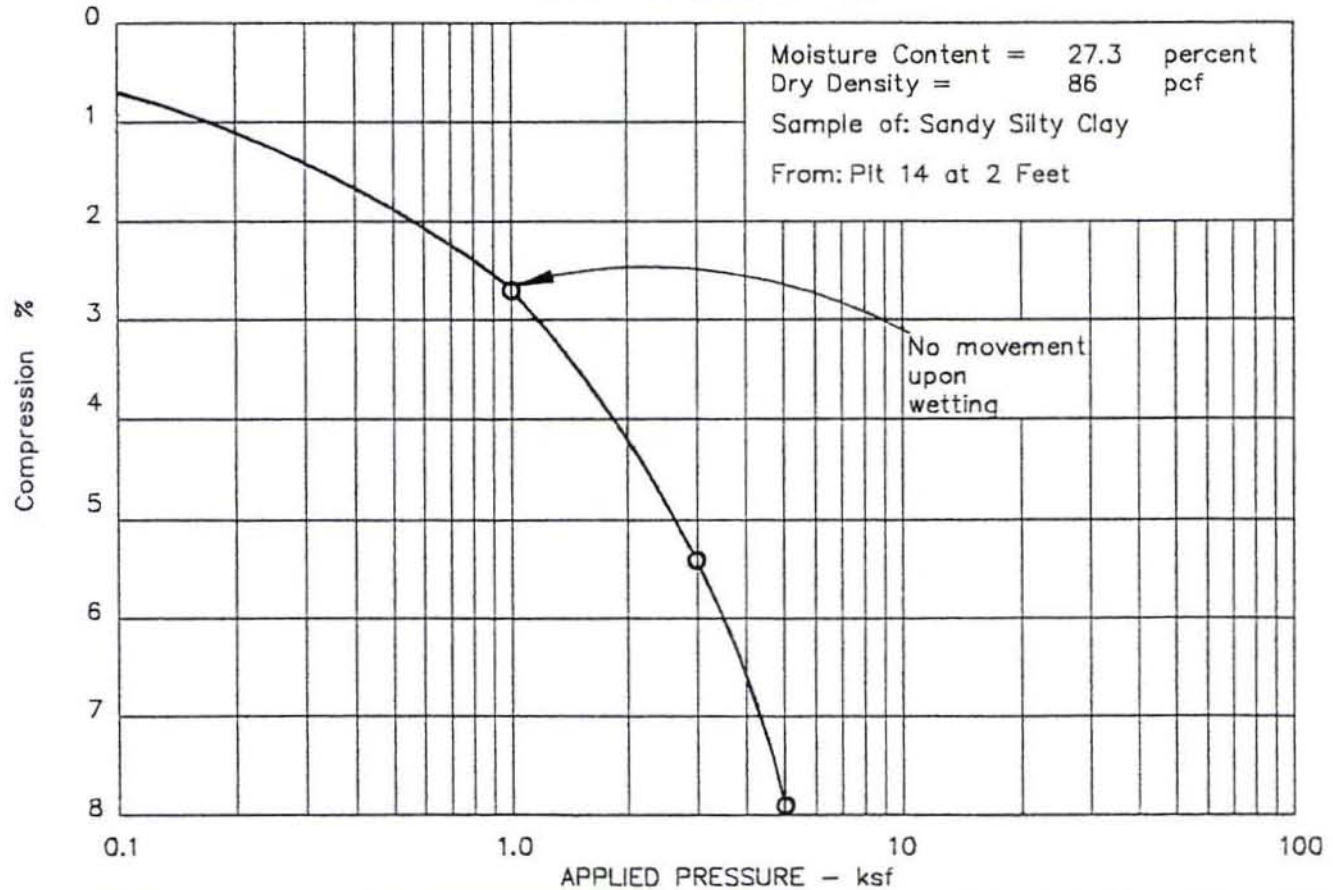
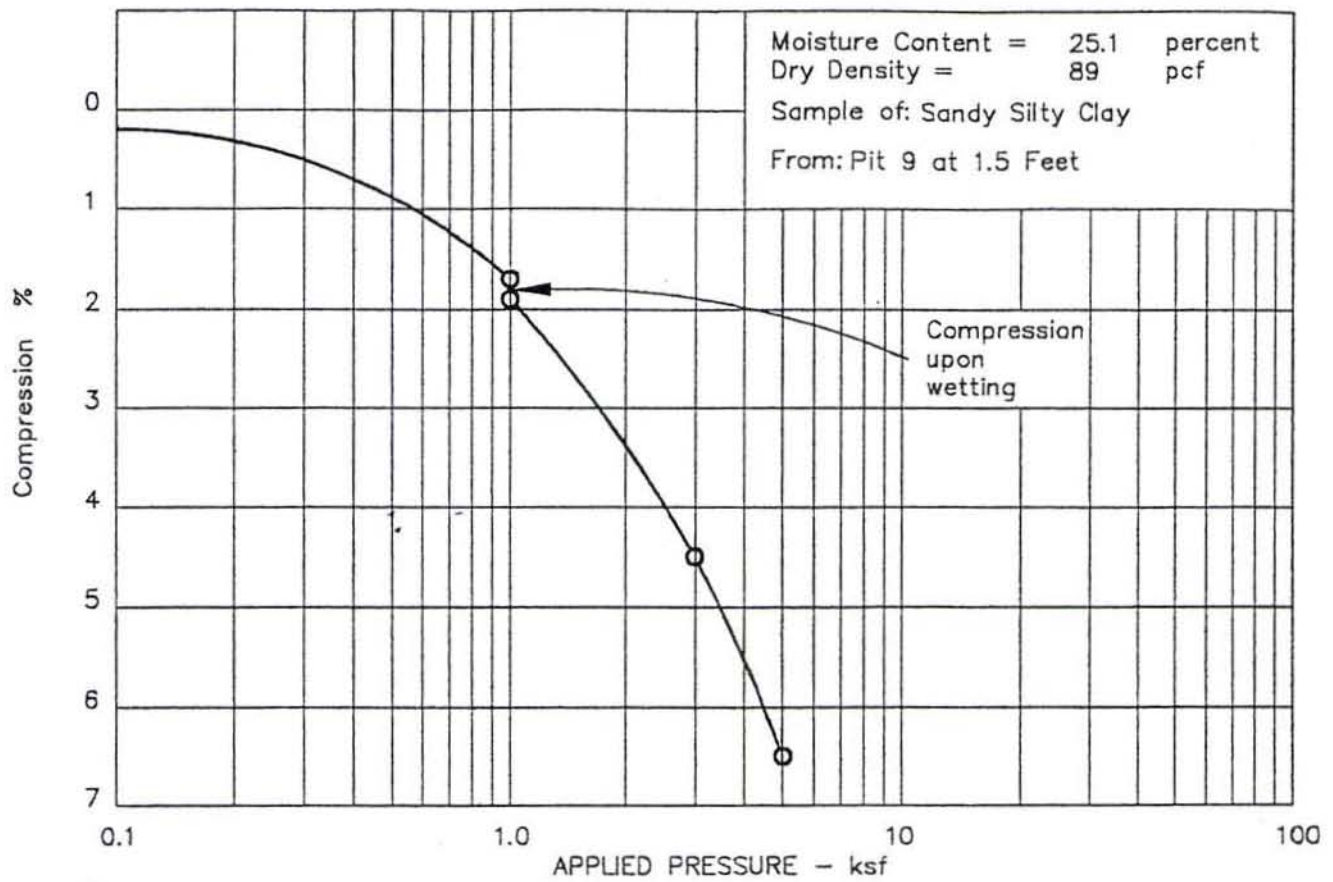


TABLE II

PERCOLATION TEST RESULTS

JOB NO. 100 601

Page 1 of 5

HOLE NO.	HOLE DEPTH (INCHES)	LENGTH OF INTERVAL (MIN)	WATER DEPTH AT START OF INTERVAL (INCHES)	WATER DEPTH AT END OF INTERVAL (INCHES)	DROP IN WATER LEVEL (INCHES)	AVERAGE PERCOLATION RATE (MIN./INCH)
P-1	15 ½	15 water added	8 ½	6 ¾	1 ¾	20
			6 ¾	5 ¾	1	
			9	7 ¾	1 ¼	
			7 ¾	6 ½	1 ¼	
			6 ½	5 ½	1	
			5 ½	4 ½	1	
			4 ½	3 ¾	¾	
			3 ¾	3	¾	
P-2	15	15	11	8 ¼	2 ¾	24
			8 ¼	7 ½	¾	
			7 ½	7	½	
			7	6 ½	½	
			6 ½	5 ½	½	
			5 ½	4 ¾	¾	
			4 ¾	4 ¼	½	
			4 ¼	3 ½	¾	
P-3	23	15 water added	5	3 ½	1 ½	30
			3 ½	2 ¾	¾	
			4 ½	3 ¾	¾	
			3 ¾	3	¾	
		water added	5	4	1	
			4	3 ¼	¾	
			3 ¼	2 ¾	½	
			2 ¾	2 ¼	½	

Note: Percolation tests were conducted adjacent to corresponding exploratory pits located as shown on Fig. 1. Percolation test holes were hand dug and soaked on July 28, 2000. Percolation tests were conducted on July 29, 2000 by Hepworth - Pawlak Geotechnical, Inc.

TABLE II

PERCOLATION TEST RESULTS

JOB NO. 100 601

Page 2 of 5

HOLE NO.	HOLE DEPTH (INCHES)	LENGTH OF INTERVAL (MIN)	WATER DEPTH AT START OF INTERVAL (INCHES)	WATER DEPTH AT END OF INTERVAL (INCHES)	DROP IN WATER LEVEL (INCHES)	AVERAGE PERCOLATION RATE (MIN./INCH)	
P-4	15	15	water added	9	3 ¼	5 ¼	8
				9	6	3	
				6	3	3	
		water added	9 ¼	6 ¾	2 ½		
			6 ¾	4 ¾	2		
			4 ¾	2 ¾	2		
			2 ¾	1	1 ¾		
P-5	11	15	water added	6	4 ¾	1 ¼	17
				4 ¾	4	¾	
				4	2 ½	1 ½	
				6 ¾	5 ¾	½	
				5 ¾	4 ¾	1	
				4 ¾	4	¾	
				4	3	1	
				3	2 ¼	¾	
P-6	16	15	water added	8 ¾	5 ¾	3	13
				5 ¾	3 ¾	2	
				3 ¾	2	1 ¾	
				2	1	1	
				10 ½	8 ¾	2 ¼	
				8 ¾	6 ½	1 ¾	
				6 ½	5 ¾	1 ¾	
				5 ¾	4 ¾	1	

Note: Percolation tests were conducted adjacent to corresponding numbered exploratory pits located as shown on Fig. 1. Percolation test holes were hand dug and soaked on July 28, 2000. Percolation tests were conducted on July 29, 2000 by Hepworth - Pawlak Geotechnical, Inc.

TABLE II

PERCOLATION TEST RESULTS

JOB NO. 100 601

Page 3 of 5

HOLE NO.	HOLE DEPTH (INCHES)	LENGTH OF INTERVAL (MIN)	WATER DEPTH AT START OF INTERVAL (INCHES)	WATER DEPTH AT END OF INTERVAL (INCHES)	DROP IN WATER LEVEL (INCHES)	AVERAGE PERCOLATION RATE (MIN./INCH)
P-7	11 ½	15	5 ¾	2 ¾	3	20
			2 ¾	¾	2	
		water added	6	4 ½	1 ½	
			4 ½	3 ½	1	
		water added	5 ¾	4 ½	1 ¼	
			4 ½	4	½	
			4	3 ¼	¾	
			3 ¼	2 ½	¾	
P-8	23	15	8 ¾	5 ½	3 ¼	8
			9 ¾	6 ¾	3	
		water added	6 ¾	4	2 ¾	
			4	2	2	
		water added	9 ½	6 ¾	2 ¾	
			6 ¾	4 ¾	2	
			4 ¾	3	1 ¾	
			3	1	2	
P-9	26 ½	15	8 ¾	3 ½	4 ¾	7
			9 ¾	5 ¼	4	
		water added	5 ¼	1 ¾	3 ½	
			9 ¾	7 ¾	2	
		water added	7 ¾	5 ½	2 ¾	
			5 ½	3	2 ½	
			3	1	2	

Note: Percolation tests were conducted adjacent to corresponding exploratory pits located as shown on Fig. 1. Percolation test holes were hand dug and soaked on July 28, 2000. Percolation tests were conducted on July 29, 2000 by Hepworth - Pawlak Geotechnical, Inc.

TABLE II

PERCOLATION TEST RESULTS

JOB NO. 100 601

Page 4 of 5

HOLE NO.	HOLE DEPTH (INCHES)	LENGTH OF INTERVAL (MIN)	WATER DEPTH AT START OF INTERVAL (INCHES)	WATER DEPTH AT END OF INTERVAL (INCHES)	DROP IN WATER LEVEL (INCHES)	AVERAGE PERCOLATION RATE (MIN./INCH)	
P-10	18	15	6	1 ½	4 ½	15	
			water added	5	3 ¾		1 ¼
		water added	3 ¾	2 ¾	1		
			5	3 ½	1 ½		
			3 ½	2 ½	1		
			2 ½	1 ½	1		
P-11	26 ½	15	6	3 ½	2 ½	13	
			3 ½	1 ¼	2 ¼		
			4 ½	2 ½	2		
		water added	2 ½	1	1 ½		
			7	5 ½	1 ½		
			5 ½	4 ½	1		
			4 ½	3 ¼	1 ¼		
P-12	23	15	5 ¾	2 ¾	3	7	
			water added	2 ¾	1		1 ¾
			5 ½	3 ½	2		
		water added	3 ½	1 ¼	2 ¼		
			4 ½	2 ¼	2 ¼		
			4 ½	2	2 ½		
			2 ¼	¼	2		

Note: Percolation tests were conducted adjacent to corresponding exploratory pits located as shown on Fig. 1. Percolation test holes were hand dug and soaked on July 28, 2000. Percolation tests were conducted on July 29, 2000 by Hepworth - Pawlak Geotechnical, Inc.

TABLE II

PERCOLATION TEST RESULTS

JOB NO. 100 601

Page 5 of 5

HOLE NO.	HOLE DEPTH (INCHES)	LENGTH OF INTERVAL (MIN)	WATER DEPTH AT START OF INTERVAL (INCHES)	WATER DEPTH AT END OF INTERVAL (INCHES)	DROP IN WATER LEVEL (INCHES)	AVERAGE PERCOLATION RATE (MIN./INCH)
P-13	23 ½	15	6	1 ½	4 ½	3
		water added	6 ½	1 ¼	5 ¼	
		water added	6	1 ¾	4 ¼	
		water added	6	1	5	
		water added	7	½	6 ½	
P-14	23	15	7 ½	5	2 ½	15
		water added	5	3 ¼	1 ¾	
		water added	8	6 ¼	1 ¾	
		water added	6 ¼	4 ½	1 ¾	
		water added	4 ½	2 ½	2	
		water added	8	6	2	
		water added	6	4 ½	1 ½	
		water added	4 ½	3 ½	1	
		water added	3 ½	2 ½	1	

Note: Percolation tests were conducted adjacent to corresponding exploratory pits located as shown on Fig. 1. Percolation test holes were hand dug and soaked on July 28, 2000. Percolation tests were conducted on July 29, 2000 by Hepworth - Pawlak Geotechnical, Inc.

Application Attachment 5

Preliminary Effluent Limits (PELs), CDPHE, WQCD.

STATE OF COLORADO

Bill Owens, Governor
Jane E. Norton, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S. Laboratory and Radiation Services Division
Denver, Colorado 80246-1530 8100 Lowry Blvd.
Phone (303) 692-2000 Denver, Colorado 80230-6928
TDD Line (303) 691-7700 (303) 692-3090
Located in Glendale, Colorado

<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

May 24, 2001

Thomas A. Zancanella, PE
Zancanella and Associates, Inc.
PO Box 1908
1005 Cooper Avenue
Glenwood Springs, CO 81602

Re: Proposed Blue Creek Ranch WWTP, Garfield County

Dear Mr. Zancanella:

The Colorado Department of Public Health and Environment, Water Quality Control Division, has completed your request for preliminary effluent limits (PELs) for the proposed Blue Creek Ranch wastewater treatment plant (WWTP). Your current proposal is for a WWTP with a hydraulic design capacity of 0.02 million gallons per day (MGD).

This proposed facility would discharge into the Roaring Fork River in the NW1/4 of SE1/4, Section 31, Township 7 South, Range 87 West of the 6th P.M. in Garfield County. This portion of the Roaring Fork River is identified as stream segment COUCRF03, which means the Upper Colorado River Basin, Roaring Fork River Subbasin, Stream Segment 3. This stream segment is composed of the "Mainstem of the Roaring Fork River, including all tributaries, wetlands, lakes and reservoirs from a point immediately below the confluence with Hunter Creek, to the confluence with the Colorado River except for those tributaries included in Segment 1 and specific listings in Segments 3a through 10." These identifications are found in the *Classification and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12)*.

Effluent limits for specific constituents are based on the type of permit a facility will require after construction. The Blue Creek Ranch WWTP may be covered by a general permit.

The preliminary effluent limitations were developed for the Blue Creek Ranch WWTP based on effluent limits established in the *Regulations for Effluent Limitations* for a WWTP consisting of a mechanical wastewater treatment process, as well as the water quality-based effluent limits necessary for protection of the water quality of the Roaring Fork River. A PELs evaluation is attached to document the findings and decisions that were used to derive the PELs in Table 1.

Proposed Blue Creek Ranch WWTP

Thomas A. Zancanella, PE

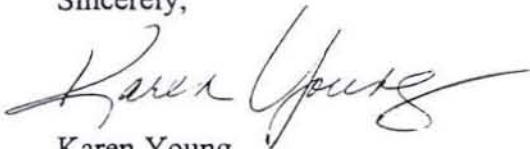
May 24, 2001

Page 2

Table 1 Proposed Blue Creek Ranch WWTP Preliminary Effluent Limits for Discharge to the Roaring Fork River	
BOD ₅ (mg/l)	45 (7-day average), 30 (30-day average)
BOD ₅ (% removal)	85 (30-day average)
TSS, mechanical plant (mg/l)	45 (7-day average), 30 (30-day average)
TSS, mechanical plant only (% removal)	85 (30-day average)
Oil and Grease (mg/l)	10 (maximum)
pH (s.u.)	6.5-9.0 (minimum-maximum)
Fecal Coliform (organisms/100 ml)	12,000 (7-day average), 6,000 (30-day average)
Total Residual Chlorine (mg/l)	0.5 (maximum)

If you have any questions regarding this matter, please contact me at (303) 692-3614.

Sincerely,



Karen Young
Environmental Protection Specialist
Permits Unit, Water Quality Protection Section
Water Quality Control Division

ENCLOSURE

cc: Local Health Department
Dwain Watson, District Engineer, Grand Junction Office
Tom Bennett, Drinking Water and Wastewater Technical Services
Garfield County File

**PRELIMINARY EFFLUENT LIMITS
ROARING FORK RIVER
BLUE CREEK RANCH WWTP**

Blue Creek Ranch WWTP	Name of Facility
CO-PEL	CDPS number
Upper Colorado River Basin, Roaring Fork River Subbasin, Stream Segment 3: Mainstem of the Roaring Fork River, including all tributaries, wetlands, lakes and reservoirs from a point immediately below the confluence with Hunter Creek, to the confluence with the Colorado River except for those tributaries included in Segment 1 and specific listings in Segments 3a through 10. COUCRF03	WBID - Stream Segment
Cold Water Aquatic Life Class 1 Class 1 Recreation Agriculture Water Supply	Classifications
Undesignated	Designation

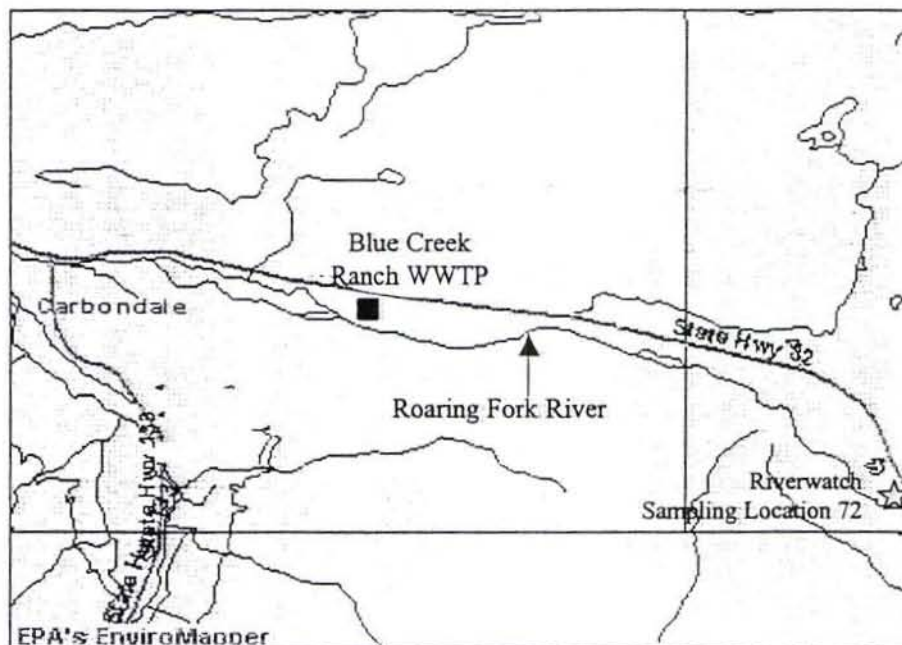
I. Introduction

The Preliminary Effluent Limits (PELs) analysis of the Roaring Fork River near the proposed Blue Creek Ranch Wastewater Treatment Plant (WWTP) was developed for the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division (WQCD). The PELs analysis was prepared to facilitate issuance of a Colorado Discharge Permit System (CDPS) permit for the proposed Blue Creek Ranch WWTP.

Figure 1 on the following page contains a map of the study area evaluated as part of this PEL.

The proposed Blue Creek Ranch WWTP will discharge the Roaring Fork River. The ratio of the low flow of the Roaring Fork River to the design flow of the proposed Blue Creek Ranch WWTP is 6065:1. Although four other facilities discharge within seven miles downstream of the proposed Blue Creek Ranch WWTP, due to the small design flow of the proposed facility versus the high flow rate of the receiving stream, analyses indicate that assimilative capacities are extremely large.

Figure 1
Study Area



LEGEND

- Discharges to water
- Superfund sites
- Hazardous waste
- Toxic releases
- Air releases
- Others
- Multiple
- ~ Streets
- ▨ Water Bodies
- Counties

Source: EPA's Enviromapper,
8.2 mi across

Information used in this assessment includes data gathered from the U. S. Geological Survey (USGS), the U.S. Environmental Protection Agency (EPA), Riverwatch, and the WQCD. The data used in the assessment consist of the best information available at the time of preparation of this PELs package.

II. Water Quality

The proposed Blue Creek Ranch WWTP will discharge to the Water Body Identification (WBID) stream segment COUCRF03, which means the Upper Colorado River Basin, Roaring Fork River Subbasin, Stream Segment 3. This segment is composed of the "Mainstem of the Roaring Fork River, including all tributaries, wetlands, lakes and reservoirs from a point immediately below the confluence with Hunter Creek, to the confluence with the Colorado River except for those tributaries included in Segment 1 and specific listings in Segments 3a through 10." Stream segment

COUCRF03 is classified for Cold Water Aquatic Life Class 1, Class 1 Recreation, Agriculture, and Water Supply.

Numeric standards are developed on a basin-specific basis and are adopted for particular stream segments by the Water Quality Control Commission. To simplify the listing of the segment-specific standards, many of the aquatic life standards are contained in a table at the beginning of each chapter of the regulations. The standards in Table 2 have been assigned to stream segment COUCRF03 in accordance with the *Classification and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12)*.

Table 2
In-stream Standards for Stream Segment COUCRF03
<i>Physical and Biological</i>
Dissolved Oxygen (DO) = 7 mg/l, minimum
pH = 6.5 - 9 su
Fecal Coliform = 200 colonies/100 ml
<i>Inorganic</i>
Un-ionized ammonia acute = TVS
Un-ionized ammonia chronic = 0.02 mg/l
Chlorine acute = 0.019 mg/l
Chlorine chronic = 0.011 mg/l
Free Cyanide acute = 0.005 mg/l
Sulfide chronic = 0.002 mg/l
Boron chronic = 0.75 mg/l
Nitrite = 0.05 mg/l
Nitrate = 10 mg/l
Chloride chronic = 250 mg/l
Sulfate chronic = 250 mg/l
<i>Metals</i>
Total Recoverable Arsenic acute = 50 ug/l
Dissolved Cadmium acute for trout and Dissolved Cadmium chronic = TVS
Total Recoverable Trivalent Chromium acute = 50 ug/l
Dissolved Hexavalent Chromium acute and chronic = TVS
Dissolved Copper acute and chronic = TVS
Dissolved Iron chronic = 300 ug/l
Total Recoverable Iron chronic = 1000 ug/l
Dissolved Lead acute and chronic = TVS
Dissolved Manganese chronic = 50 ug/l
Total Mercury chronic = 0.01 ug/l
Dissolved Nickel acute and chronic = TVS
Dissolved Selenium acute and chronic = TVS
Dissolved Silver acute and Dissolved Silver chronic for trout = TVS
Dissolved Zinc acute and chronic = TVS

Standards for metals are generally shown in the regulations as Table Value Standards (TVS), and these often must be derived from equations that depend on the receiving stream hardness or species

of fish present. The Classification and Numeric Standards documents for each basin include a specification for appropriate hardness values to be used. Specifically, the regulations state that:

The hardness values used in calculating the appropriate metal standard should be based on the lower 95% confidence limit of the mean hardness value at the periodic low flow criteria as determined from a regression analysis of site-specific data. Where insufficient site-specific data exists to define the mean hardness value at the periodic low flow criteria, representative regional data shall be used to perform the regression analysis. Where a regression analysis is not appropriate, a site-specific method should be used.

Hardness data for the Roaring Fork River near the point of discharge of the proposed Blue Creek Ranch WWTP were insufficient to conduct a regression analysis based on the low flow. In the absence of a regression analysis, the WQCD's alternative approach to calculating hardness was used, which involves computing a mean hardness.

The mean hardness was computed to be 199 mg/l as CaCO₃ based on sampling conducted at Riverwatch sampling location 72 (Roaring Fork River at 7-11 Bridge) located approximately 7 miles upstream of the proposed Blue Creek Ranch WWTP. This mean hardness from the Roaring Fork River and the formulas contained in the TVS were used to calculate the in-stream water quality standards for metals as shown in Table 3.

Ambient Water Quality

The WQCD evaluates ambient water quality based on a variety of statistical methods as prescribed in Section 31.8(2)(a)(i) and 31.8(2)(b)(i)(B) of the *Colorado Department of Public Health and Environment Water Quality Control Commission Regulation No. 31*. Ambient water quality is evaluated as part of this assessment to determine assimilative capacities.

To conduct an assessment of the ambient water quality upstream of the Blue Creek Ranch WWTP, data were gathered from two sources. Data from the Riverwatch sampling location 72, located approximately seven miles upstream of the proposed Blue Creek Ranch WWTP, were used to determine ambient background concentrations for pH, temperature, dissolved oxygen, and hardness. Data were available for a period of record from October 1995 through February 2000. Data gathered at the WQCD sampling location 000144/12708 (Roaring Fork River below Aspen), located approximately twenty-five miles upstream of the proposed Blue Creek Ranch WWTP, provided background data on fecal coliform, ammonia, and metals. This WQCD sampling location was designated as sampling location 000144 until 1997, and later renumbered as WQCD sampling location 12708. These data were available for a period of record from October 1996 through April 2000. These data, which represent upstream ambient water quality, are summarized in Table 4.

III. Water Quantity

The Colorado Regulations specify the use of low flow conditions when establishing water quality based effluent limitations, specifically the acute and chronic low flows. The acute low flow, referred

to as 1E3, represents the one-day low flow recurring in a three-year interval. The chronic low flow, 30E3, represents the 30-day average low flow recurring in a three-year interval.

Table 3			
Site-Specific Water Quality Standards for the Proposed Blue Creek Ranch WWTP			
Based on the Table Value Standards Contained in the Colorado Department of Public Health and Environment Water Quality Control Commission <i>Regulation 33</i>			
Calculated Using the Following Value for Hardness as CaCO ₃ :			199 mg/l
<i>Parameter</i>	<i>In-Stream Water Quality Standard</i>		<i>Formula Used</i>
Cadmium, Dissolved	Trout	8.5 ug/l	$e^{(1.128(\ln(\text{hardness}))-3.828)}$
	Chronic	1.9 ug/l	$e^{(0.7852(\ln(\text{hardness}))-3.490)}$
Hexavalent Chromium, Dissolved	Acute	16 ug/l	Numeric standards provided, formula not applicable
	Chronic	11 ug/l	Numeric standards provided, formula not applicable
Copper, Dissolved	Acute	34 ug/l	$e^{(0.9422(\ln(\text{hardness}))-1.4634)}$
	Chronic	21 ug/l	$e^{(0.8545(\ln(\text{hardness}))-1.465)}$
Lead, Dissolved	Acute	291 ug/l	$e^{(1.6148(\ln(\text{hardness}))-2.8736)}$
	Chronic	10 ug/l	$e^{(1.417(\ln(\text{hardness}))-5.167)}$
Nickel, Dissolved	Acute	1561 ug/l	$e^{(0.76(\ln(\text{hardness}))+3.33)}$
	Chronic	161 ug/l	$e^{(0.76(\ln(\text{hardness}))+1.06)}$
Selenium, Dissolved	Acute	20 ug/l	Numeric standards provided, formula not applicable
	Chronic	5.0 ug/l	Numeric standards provided, formula not applicable
Silver, Dissolved	Acute	6.6 ug/l	$e^{(1.72(\ln(\text{hardness}))-7.21)}$
	Trout	0.25 ug/l	$e^{(1.72(\ln(\text{hardness}))-10.51)}$
Zinc, Dissolved	Acute	210 ug/l	$e^{(0.8473(\ln(\text{hardness}))+0.8604)}$
	Chronic	190 ug/l	$e^{(0.8473(\ln(\text{hardness}))+0.7614)}$

Low Flow Analysis

To determine the low flows available to the proposed Blue Creek Ranch WWTP, a flow gage measurement immediately upstream of the proposed facility should be used. There are, however, no gage stations within 15 miles upstream or downstream of the proposed facility.

Low flows were therefore determined using a comprehensive analysis of the flow balance of the Roaring Fork River performed by the WQCD in 1998. As part of this analysis, the WQCD obtained Roaring Fork River daily flow data from several USGS gage stations and then performed a flow balance throughout the basin to determine low flows at multiple discharge points and tributary

confluences. Based on this analysis, the estimated low flows for the proposed Blue Creek Ranch WWTP are presented in Table 5.

<i>Parameter</i>	<i>Number of Samples</i>	<i>15th Percentile</i>	<i>50th Percentile</i>	<i>85th Percentile</i>	<i>Mean</i>	<i>Chronic Stream Standard</i>	<i>Notes</i>
Temp (°C)	44	1.9	6	12	6.4	20	1
DO (mg/l)	36	8.5	10	12	10	7	1
pH (su)	36	8.3	8.6	9	8.6	6.5-9	1
Fecal Coliform (#/100 ml)	18	1	1	3	2	200	2
Hardness (mg/l CaCO ₃)	45	139	202	246	199	NA	1
As, Dis (ug/l)	25	0	0	0	0.080	NA	3
Cd, Dis (ug/l)	33	0	0	0	0	1.9	2
Cu, Dis (ug/l)	33	0	0	0	0.052	21	3
Fe, Dis (ug/l)	6	14	15	29	22	300	
Fe, Trec (ug/l)	33	32	46	142	139	1000	3
Pb, Dis (ug/l)	33	0	0	0	0.097	10	3
Mn, Dis (ug/l)	33	0	0	0.48	0.63	50	3
Hg, Tot (ug/l)	19	ND	ND	ND	ND	0.01	4
Se, Dis (ug/l)	27	0	0	0	0.29	5	3
Ag, Dis (ug/l)	28	ND	ND	ND	ND	0.25	4
Zn, Dis (ug/l)	33	0	0	21	10	190	3
B, Dis (mg/l)	9	0	0	0	0	250	3
Sulfate (mg/l)	33	44	93	130	92	250	3
P, Tot (mg/l)	14	0.030	0.04	0.061	0.048	NA	
Nitrate+Nitrite (mg/l)	33	0	0	0.25	0.11	NA	3
TKN (mg/l)	8	0	0	0	0	NA	3
NH ₃ , Tot (mg/l)	33	0	0	0	0.00091	NA	3
NH ₃ , Unionized (mg/l)	28	0.003	0.006	0.013	0.0096	0.02	
TSS (mg/l)	33	0	0	17	5.8	NA	3

Note 1: Data were taken from Riverwatch sampling location 72 (7-11 Bridge in Basalt) located approximately 7 miles upstream of the proposed Blue Creek Ranch WWTP. This data covers the period of record of 10/95 through 2/00.

Note 2: The calculated mean is the geometric mean and the stream standard is in units of #/100 ml. Note that for summarization purposes, the value of one was used where there was no detectable amount because the geometric mean of one is equal to zero.

Note 3: When sample results were non-detect, the value of zero was used in accordance with the CO WQCD's standard approach for summarization and averaging purposes.

Note 4: The noted parameters were found at less than detectable levels. The detection levels, however, were greater than the in-stream standards. In accordance with WQCD procedures, ambient water quality is not determined using non-detect data when detection levels are greater than the in-stream standards.

In the months of January, June, July, and October, the acute low flow exceeded the chronic low flow. In accordance with WQCD standard procedures, the acute low flow was set equal to the chronic low flow for these months.

<i>Low Flow (cfs)</i>	<i>Annual</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
1E3 Acute	159	239	201	210	189	159	365	333	282	235	290	284	265
30E3 Chronic	188	239	239	239	227	188	365	333	296	307	290	301	265

IV. Technical Analysis

Low flows and in-stream background data evaluated in sections II and III are ultimately used to determine the assimilative capacity of the Roaring Fork River near the proposed Blue Creek Ranch WWTP for pollutants of concern. For all parameters except ammonia, it is the WQCD's approach to conduct a technical analysis of stream assimilation capacity using the lowest of the monthly low flows (referred to as the annual low flow) as calculated in the low flow analysis. For ammonia, it is the standard procedure of the WQCD to determine assimilative capacities for each month using the monthly low flows calculated in the low flow analysis, as the regulations allow the use of seasonal flows when establishing assimilative capacities.

The WQCD's standard analysis consists of steady-state, mass-balance calculations for most pollutants and modeling for pollutants such as ammonia. The mass-balance equation is used by the WQCD to calculate the maximum allowable concentration of pollutants in the effluent, and accounts for the upstream concentration of a pollutant, critical low flow (minimal dilution), effluent flow and the water quality standard. The mass-balance equation is expressed as:

$$M_2 = \frac{M_3 Q_3 - M_1 Q_1}{Q_2}$$

Q_1 = Upstream low flow (1E3 or 30E3)

Q_2 = Average daily effluent flow (design capacity)

Q_3 = Downstream flow ($Q_1 + Q_2$)

M_1 = In-stream background pollutant concentrations

M_2 = Calculated maximum allowable effluent pollutant concentration

M_3 = Maximum allowable in-stream pollutant concentration (water quality standards)

For non-conservative parameters and ammonia, the mass-balance equation is not as applicable and thus other approaches are considered where appropriate. Note that conservative pollutants are pollutants that are modeled as if mass is conserved and there is no degradation, whereas non-conservative pollutants degrade and sometimes are created within a receiving stream depending on stream conditions. A more detailed discussion of the technical analysis for these parameters is provided in the pages that follow.

Pollutants of Concern

The following pollutants were identified by the WQCD as pollutants of concern for this facility:

- BOD₅
- TSS
- Percent removal;
- Oil and Grease
- pH
- DO
- Fecal Coliform
- Total Residual Chlorine
- Ammonia.

There are no in-stream water quality standards for BOD₅, TSS, percent removal, and oil and grease for the Roaring Fork River. Thus, assimilative capacities were not determined for these parameters in this section and an antidegradation review for these parameters was not conducted in Section V. However, the evaluation of applicable limitations for these pollutants can be found in Section VI, Regulatory Analysis.

During assessment of the facility, nearby facilities, and receiving stream water quality, no additional parameters were identified as pollutants of concern. It should be noted that cyanide and metals are not evaluated as part of PELs development because it is the WQCD's approach to ensure control of cyanide and metals through a pretreatment program, if necessary, versus through wastewater treatment.

Blue Creek Ranch WWTP: The proposed Blue Creek Ranch WWTP will be located near the town of Mulford in the Southwestern-most corner of Garfield County, specifically, the NW quarter of the SE quarter of Section 31, Township 7 South, Range 87 West of the 6th P.M. The proposed design capacity of the facility is 0.02 MGD (0.031 cfs). The proposed wastewater treatment is a mechanical wastewater treatment process. The technical analyses that follow include assessments of the assimilative capacity based on this proposed design capacity.

Nearby Sources

An assessment of nearby facilities based on EPA's Permit Compliance System (PCS) database found 51 dischargers in the Garfield County area. Because of its proximity to Eagle and Pitkin Counties (within five miles upstream) facilities in these counties were assessed also. Several of the facilities conducted construction related operations and thus had no pollutants of concern in common with

proposed Blue Creek Ranch WWTP. Other facilities discharged to different watersheds or were located more than twenty miles from the proposed Blue Creek Ranch WWTP and thus were not considered to be of relevance to this analysis.

The nearest dischargers were:

- The Mid-Valley Metropolitan District WWTP (COG584007), located 4 miles upstream near the town of El Jebel, discharges directly into the Roaring Fork River. A few miles farther upstream the Basalt Sanitation District WWTP (CO0021491), which services the town of Basalt, also discharges to the Roaring Fork River.
- The Ranch at Roaring Forks (COG584051) discharges to the Roaring Fork River approximately two miles downstream and the Town of Carbondale WWTP (COG584050) discharges four miles downstream of the proposed Blue Creek Ranch WWTP.

The ambient water quality background concentrations used in the mass-balance equation account for pollutants of concern contributed by upstream sources, and thus it was not necessary to model upstream dischargers together with the Blue Creek Ranch WWTP when determining available assimilative capacities in the Roaring Fork River. Because of the significant dilution available relative to the size of the dischargers of concern, downstream dischargers were not found to affect the assimilative capacity calculations for the Roaring Fork River near the proposed Blue Creek Ranch WWTP.

Based on available information, there is no indication that non-point sources were a significant source of pollutants of concern. Thus, non-point sources were not considered in this assessment.

BOD₅, TSS, and Percent Removal: There are no in-stream water quality standards for BOD₅, TSS, and percent removal for the Roaring Fork River. Thus, assimilative capacities for these parameters were not calculated.

Oil and Grease: There are no in-stream water quality standards for total oil and grease for the Roaring Fork River. Thus, assimilative capacities for total oil and grease were not calculated.

pH: The pH of a stream measures the intensity of the acidity or alkalinity of the stream. When pH falls outside of the neutral range, it can be harmful to aquatic life. To determine assimilative capacities of a stream for pH, the buffering capacity of the receiving stream and its interaction with the discharge contributions would need to be assessed in a complex evaluation.

An evaluation of pH data available for the Roaring Fork River near the proposed Blue Creek Ranch WWTP found that the 15th percentile value was well above the minimum in-stream water quality standard and the 85th percentile value was well below the maximum in-stream water quality standard.

Because only limited data are available and because ambient water quality data indicate that no further controls are needed to meet in-stream pH standards, a complex evaluation of the assimilative capacity for pH is not warranted for this facility.

DO: The availability of dissolved oxygen in receiving streams is critical for aquatic life. Decomposition of organic matter and nitrification within receiving streams are generally the causes of depletion of DO in receiving waters.

For a non-conservative parameter like DO, a simple mass balance cannot be used to determine assimilative capacity. Instead, DO background, stream flow, 5-day biochemical oxygen demand and ammonia loading, stream dimensions, temperature, and estimates of effluent DO may be incorporated into models such as the Streeter-Phelps DO model or STREAMDO to simulate the impact of the proposed Blue Creek Ranch WWTP discharge.

An evaluation of DO data available for the Roaring Fork River near the proposed Blue Creek Ranch WWTP found that the 15th percentile value was well above the minimum in-stream water quality standard. Because only limited data are available and because ambient water quality data indicate that no further controls are needed to meet in-stream standards for DO, modeling was not conducted as part of this evaluation and no further discussion of DO is provided.

Chlorine: The mass-balance equation was used to determine the assimilative capacity for chlorine. There are no point sources discharging total residual chlorine within one mile of the proposed Blue Creek Ranch WWTP. Because chlorine is rapidly oxidized, in-stream levels of residual chlorine are detected only for a short distance below a source. Ambient chlorine was therefore assumed to be zero.

Using the mass-balance equation provided in the beginning of Section IV, the acute and chronic low flows set out in Section III, the chlorine background concentration of zero as discussed above, and the in-stream standards for chlorine shown in Section II, assimilative capacities for chlorine were calculated. The data used and the resulting calculations of the allowable discharge concentration, M_2 , are also set forth below.

<i>Parameter</i>	Q_1 (cfs)	Q_2 (cfs)	Q_3 (cfs)	M_1 (ug/l)	M_3 (ug/l)	M_2 (ug/l)
Acute Chlorine	159	0.031	159.031	0	19	97,471
Chronic Chlorine	188	0.031	188.031	0	11	66,721

Fecal Coliform: There are no point sources discharging fecal coliform within one mile of the proposed Blue Creek Ranch WWTP. Thus fecal coliform assimilative capacities were evaluated separately.

It is the standard approach of the WQCD to perform a mass-balance check to determine if fecal coliform standards are exceeded. And, as is standard WQCD procedure, the checks are only conducted on the chronic low flows as set out in Section III. Using the mass-balance equation provided in the beginning of Section IV, the background concentration for fecal coliform contained in Section II, and the in-stream standards for fecal coliform shown in Section II, checks for fecal

coliform were conducted. The data used and the resulting calculations of the allowable discharge concentration, M_2 , are also set forth below.

<i>Parameter</i>	Q_1 (cfs)	Q_2 (cfs)	Q_3 (cfs)	M_1 (#/100 ml)	M_3 (#/100 ml)	M_2 (#/100 ml)
Fecal Coliform	188	0.031	188.031	2	200	1,200,974

Ammonia: Ammonia is present in the aqueous environment in both ionized and un-ionized forms. It is the un-ionized form which is toxic and which is addressed by water quality standards. The proportion of total ammonia present in un-ionized form in the receiving stream is a function of the upstream and effluent ammonia concentrations, and the pH and temperature of the receiving stream and of the effluent, combined.

The Colorado Ammonia Model (CAM) is a software program designed to project the downstream effects of ammonia and the ammonia assimilative capacities available to each discharger based on upstream water quality and effluent discharges. To develop data for the CAM, an in-stream water quality study must be conducted of the upstream receiving water conditions, particularly the pH and corresponding temperature, over a period of at least one year.

There were no data in the Roaring Fork River near the proposed Blue Creek Ranch WWTP that could be used as adequate input data for the CAM. Therefore, the WQCD standard procedure is to rely on default values for the allowable chronic concentrations of in-stream total ammonia, which are provided in the *Colorado Total Maximum Daily Load and Wasteload Allocation Guidance* and the *CDPS Summary of Rationale General Permit for Domestic Wastewater Treatment Facilities that Discharge to Receiving Waters with a Chronic Low Flow: Design Flow Ratio of 100:1 or Greater*. Note that acute values are not provided in these sources and thus are not evaluated as part of this assessment.

Using the mass-balance equation provided in the beginning of Section IV, the acute and chronic low flows set out in Section III, the mean ammonia background concentration shown in Section II, and the in-stream standards found in the *Colorado Total Maximum Daily Load and Wasteload Allocation Guidance* and the *CDPS Summary of Rationale General Permit for Domestic Wastewater Treatment Facilities that Discharge to Receiving Waters with a Chronic Low Flow: Design Flow Ratio of 100:1 or Greater* for M_3 , assimilative capacities for chronic total ammonia were calculated. The data used and the resulting calculations of the allowable discharge concentration, M_2 , are contained in Table 6.

V. Antidegradation Review

As set out in *The Basic Standards and Methodologies of Surface Water*, Section 31.8(2)(b), an antidegradation analysis is required except in cases where the receiving water is designated as "Use Protected." Note that "Use Protected" waters are waters "that the Commission has determined do

not warrant the special protection provided by the outstanding waters designation or the antidegradation review process” as set out in Section 31.8(2)(b). The antidegradation section of the regulation became effective in December 2000, and therefore antidegradation considerations are applicable to the proposed Blue Creek Ranch WWTP permit issuance.

According to the Classification and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12), stream segment COUCRF03 is Undesignated. Thus, an antidegradation review is required for this segment if new or increased impacts are found to occur.

<i>Parameter</i>	Q_1 (cfs)	Q_2 (cfs)	Q_3 (cfs)	M_1	M_3	M_2
NH ₃ , Tot (mg/l) Jan	239	0.031	239.031	0.00091	0.70	5,390
NH ₃ , Tot (mg/l) Feb	239	0.031	239.031	0.00091	0.60	4,619
NH ₃ , Tot (mg/l) Mar	239	0.031	239.031	0.00091	0.40	3,077
NH ₃ , Tot (mg/l) Apr	227	0.031	227.031	0.00091	0.40	2,923
NH ₃ , Tot (mg/l) May	188	0.031	188.031	0.00091	0.30	1,814
NH ₃ , Tot (mg/l) Jun	365	0.031	365.031	0.00091	0.30	3,522
NH ₃ , Tot (mg/l) Jul	333	0.031	333.031	0.00091	0.30	3,213
NH ₃ , Tot (mg/l) Aug	296	0.031	296.031	0.00091	0.30	2,856
NH ₃ , Tot (mg/l) Sep	307	0.031	307.031	0.00091	0.30	2,962
NH ₃ , Tot (mg/l) Oct	290	0.031	290.031	0.00091	0.30	2,798
NH ₃ , Tot (mg/l) Nov	301	0.031	301.031	0.00091	0.30	2,904
NH ₃ , Tot (mg/l) Dec	265	0.031	265.031	0.00091	0.50	4,267

The ratio of the low flow of the Roaring Fork River to the design flow of the proposed Blue Creek Ranch WWTP is 6065:1. Section 31.8 (3)(c) specifies that the discharge of pollutants should not be considered to result in significant degradation of the reviewable waters if the ratio of the low flow of the receiving water to the facility flow is greater than 100:1. Thus, condition 31.8(3)(c) of the regulations is met and no further antidegradation evaluation is necessary.

VI. Regulatory Analysis

Regulation 62, the *Regulations for Effluent Limitations*, includes effluent limitations that apply to all discharges of wastewater to State waters, with the exception of storm water and agricultural return flows. These regulations are applicable to the proposed Blue Creek Ranch WWTP discharge. Table 7 contains a summary of these limitations.

not warrant the special protection provided by the outstanding waters designation or the antidegradation review process” as set out in Section 31.8(2)(b). The antidegradation section of the regulation became effective in December 2000, and therefore antidegradation considerations are applicable to the proposed Blue Creek Ranch WWTP permit issuance.

According to the Classification and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12), stream segment COUCRF03 is Undesignated. Thus, an antidegradation review is required for this segment if new or increased impacts are found to occur.

Table 6
Monthly Assimilative Capacities for Ammonia on the Roaring Fork River
at the Proposed Blue Creek Ranch WWTP

<i>Parameter</i>	Q_1 (cfs)	Q_2 (cfs)	Q_3 (cfs)	M_1	M_3	M_2
NH ₃ , Tot (mg/l) Jan	239	0.031	239.031	0.00091	0.70	5,390
NH ₃ , Tot (mg/l) Feb	239	0.031	239.031	0.00091	0.60	4,619
NH ₃ , Tot (mg/l) Mar	239	0.031	239.031	0.00091	0.40	3,077
NH ₃ , Tot (mg/l) Apr	227	0.031	227.031	0.00091	0.40	2,923
NH ₃ , Tot (mg/l) May	188	0.031	188.031	0.00091	0.30	1,814
NH ₃ , Tot (mg/l) Jun	365	0.031	365.031	0.00091	0.30	3,522
NH ₃ , Tot (mg/l) Jul	333	0.031	333.031	0.00091	0.30	3,213
NH ₃ , Tot (mg/l) Aug	296	0.031	296.031	0.00091	0.30	2,856
NH ₃ , Tot (mg/l) Sep	307	0.031	307.031	0.00091	0.30	2,962
NH ₃ , Tot (mg/l) Oct	290	0.031	290.031	0.00091	0.30	2,798
NH ₃ , Tot (mg/l) Nov	301	0.031	301.031	0.00091	0.30	2,904
NH ₃ , Tot (mg/l) Dec	265	0.031	265.031	0.00091	0.50	4,267

The ratio of the low flow of the Roaring Fork River to the design flow of the proposed Blue Creek Ranch WWTP is 6065:1. Section 31.8 (3)(c) specifies that the discharge of pollutants should not be considered to result in significant degradation of the reviewable waters if the ratio of the low flow of the receiving water to the facility flow is greater than 100:1. Thus, condition 31.8(3)(c) of the regulations is met and no further antidegradation evaluation is necessary.

VI. Regulatory Analysis

Regulation 62, the *Regulations for Effluent Limitations*, includes effluent limitations that apply to all discharges of wastewater to State waters, with the exception of storm water and agricultural return flows. These regulations are applicable to the proposed Blue Creek Ranch WWTP discharge. Table 7 contains a summary of these limitations.

In addition to these regulations, the State has developed the *Procedure for Selection of Fecal Coliform Limitations Permit Conditions* that specifies a 30-day average limit of 6,000 colonies per 100 ml and a 7-day average limit of 12,000 colonies per 100 ml when the ratio of the receiving stream flow to design flow is greater than ten to one.

<i>Parameter</i>	<i>7-Day Average</i>	<i>30-Day Average</i>	<i>Instantaneous Maximum</i>
BOD ₅	45 mg/l	30 mg/l	NA
TSS, mechanical plant	45 mg/l	30 mg/l	NA
TSS, aerated lagoon	110 mg/l	75 mg/l	NA
TSS, non-aerated lagoon	160 mg/l	105 mg/l	NA
BOD ₅ Percent Removal		85%	
TSS Percent Removal		85%	
Total Residual Chlorine			0.5 mg/l
pH			6.0-9.0 su range
Oil and Grease			10 mg/l

Note that the TSS limitations shown above vary based on the type of wastewater treatment processes used at the facility. The *Regulations for Effluent Limitations* waive the 85 percent removal requirements for TSS where waste stabilization ponds, both aerated and non-aerated, are used as the principal process for treating domestic wastes.

VII. Preliminary Effluent Limits

The regulations require the use of the most stringent effluent limit for permit limitations. Thus, the PELs reflected in Table 8 include the most stringent of the following:

- Water quality-based effluent limits as discussed in the technical analysis contained in Section IV
- ADBELs as discussed in the antidegradation review provided in Section V
- Effluent limits prescribed by the regulations based on the regulatory analysis provided in Section VI.

BOD ₅ (mg/l)	45 (7-day average), 30 (30-day average)
BOD ₅ (percent removal)	85 (30-day average)
TSS (mg/l)	45 (7-day average), 30 (30-day average)
TSS (percent removal)	85 (30-day average)
Oil and Grease (mg/l)	10 (maximum)
pH (s.u.)	6.5-9.0 (minimum-maximum)
Fecal Coliform (organisms/100 ml)	12,000 (7-day average), 6,000 (30-day average)
Total Residual Chlorine (mg/l)	0.5 (maximum)

The *Procedure for Selection of Fecal Coliform Limitations Permit Conditions* specifies that the 7-day average limit must be calculated as two times the 30-day average limit.

Note that limitations for ammonia were not necessary for this facility because the assimilative capacity of the receiving water, as discussed in Section IV, is large enough to establish total ammonia effluent concentrations for all months at 30 mg/l. Because treated sanitary sewage effluent is not expected to have a total ammonia concentration greater than 30 mg/l, no additional allocations were determined as per WQCD procedure.

VIII. References

Colorado Total Maximum Daily Load and Wasteload Allocation Guidance, CDPHE, WQCD, November 1991.

Classification and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12), Regulation No. 33, CDPHE, WQCC, November 30, 1999.

The Basic Standards and Methodologies for Surface Water, Regulation 31, CDPHE, WQCC, November 8, 2000.

Procedure for Selection of Fecal Coliform Limitations Permit Conditions, CDPHE, WQCD, 1976.

Regulations for Effluent Limitations, Regulation 62, CDPHE, WQCC, November 9, 1998.

CDPS Summary of Rationale General Permit for Domestic Wastewater Treatment Facilities that Discharge to Receiving Waters with a Chronic Low Flow: Design Flow Ratio of 100:1 or Greater, CDPS Permit COG-584000, Statewide, CDPHE, September 14, 1994.

Application Attachment 6

Authority Letter

WINDRIVER

COMPANIES

5680 GRAND RIVER DRIVE, N.E. -- ADA, MICHIGAN 49301 -- PHONE 616.682.9270 OR 1.866.502.9270 -- FAX 616.682.2860 -- MOBILE 616.581.6000 -- EMAIL rmcjr@iserv.net
3220 COUNTY ROAD 100 -- CARBONDALE, COLORADO 81623 -- PHONE 970.704.9007 -- FAX 970.704.9006 -- MOBILE 1.866.502.6000

June 7, 2001

Colorado Department of Health and Environment
Water Quality Control Division
4300 Cherry Creek Drive South
Denver, Colorado 80246

RE: Blue Creek Ranch Wastewater Treatment Facilities

Gentlemen:

The undersigned is the Fee Simple title owner of a parcel of land in Garfield County, Colorado consisting of approximately 82 acres known as Blue Creek Ranch to be developed as a forty (40) lot subdivision, described on Exhibit "A". A copy of the deed vesting title of the site property in the Applicant is attached hereto as Exhibit "A". With respect to the wastewater plant treatment facilities to be installed as a part of this development, the undersigned certified as follows:

1. A site on Blue Creek Ranch consisting of approximately 0.33 acres will be made available for the wastewater treatment facility. The site and facilities constructed thereon will be conveyed to a homeowners association (Blue Creek Ranch Homeowners Association) to be formed.
2. A homeowners association will be formed to further the interests of Blue Creek Ranch lot owners, including the operation of the wastewater treatment facilities and the hiring of a manager for such operations. Pursuant to protective covenants to be recorded against Blue Creek Ranch, the association will be charged with the obligation to operate the system, including the hiring of a Colorado Department of Health certified operator, adoption of a budget and collection of fees to cover operation and maintenance costs of the system.

Very truly yours,

Blue Creek Land Holdings, LLC



Robert M. Cumming, Jr.
Member

EXHIBIT A

A PARCEL OF LAND SITUATED IN THE UNITED STATES GOVERNMENT LOTS 1, 2, 6, 7, 11 AND THE NORTHEAST QUARTER SOUTHWEST QUARTER OF SECTION 31, TOWNSHIP 7 SOUTH, RANGE 87 WEST OF THE SIXTH PRINCIPAL MERIDIAN, GARFIELD COUNTY, COLORADO, SAID PARCEL IS LOCATED SOUTHERLY OF COLORADO STATE HIGHWAY NO. 82, EASTERLY OF GARFIELD COUNTY ROAD 100 AND NORTHERLY OF THE DENVER AND RIO GRANDE WESTERN RAILROAD RIGHT-OF-WAY, AND IS MORE FULLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWESTERLY CORNER OF SAID GOVERNMENT LOT 2, SECTION 31, THENCE SOUTH 00 DEGREES 55'02" EAST, A DISTANCE OF 1197.02 FEET TO THE INTERSECTION OF SAID COUNTY ROAD 100 EASTERLY RIGHT-OF-WAY WITH THE SOUTHERLY RIGHT-OF-WAY OF COLORADO STATE HIGHWAY NO. 82, THE TRUE POINT OF BEGINNING; THENCE EASTERLY ALONG SAID STATE HIGHWAY SOUTHERLY RIGHT-OF-WAY THE FOLLOWING:

NORTH 81 DEGREES 01'05" EAST, A DISTANCE OF 7.29 FEET TO THE POSITION FOR COLORADO DEPARTMENT OF TRANSPORTATION (CDOT), MONUMENT 529 OF PROJECT NO. CX(PC) 24-0082-26 (MISSING), (SAID POINT IS MARKED BY A WITNESS CORNER MONUMENT, A 5/8" STEEL ROD WITH YELLOW PLASTIC CAP MARKED BUETTNER 13166 WC, AT A DISTANCE OF NORTH 81 DEGREES 01'05" EAST, 2.00 FEET FROM THE CDOT MONUMENT POSITION, SAID WITNESS CORNER MONUMENT IS LOCATED AT THE BASE OF A WIRE FENCE);

THENCE NORTH 81 DEGREES 01'05" EAST, A DISTANCE OF 120.91 FEET TO A CDOT MONUMENT 530 OF SAID CDOT PROJECT;

THENCE NORTH 72 DEGREES 01'13" EAST, A DISTANCE OF 188.81 FEET TO THE CDOT MONUMENT 531 OF SAID PROJECT;

THENCE SOUTH 84 DEGREES 43'15" EAST, A DISTANCE OF 401.16 FEET TO THE CDOT MONUMENT 532 (MISSING NOW MARKED WITH A 5/8" STEEL ROD AND YELLOW PLASTIC CAP MARKED BUETTNER 13166), OF SAID PROJECT;

THENCE SOUTH 78 DEGREES 30'40" EAST, A DISTANCE OF 382.98 FEET TO A WIRE FENCE CORNER;

THENCE DEPARTING SAID STATE RIGHT-OF-WAY SOUTH 00 DEGREES 35'23" WEST, A DISTANCE OF 1834.33 FEET ALONG A WIRE FENCE TO A FENCE CORNER;

THENCE SOUTH 89 DEGREES 16'38" EAST, A DISTANCE OF 231.46 FEET TO A FENCE CORNER;

THENCE SOUTH 00 DEGREES 10' 42" EAST A DISTANCE OF EAST, A DISTANCE OF 785.71 FEET ALONG A WIRE FENCE TO A INTERSECTION WITH THE DENVER AND RIO GRANDE WESTERN RAILROAD NORTHERLY RIGHT-OF-WAY, SAID POINT OF INTERSECTION BEING WITHIN THE ROARING FORK RIVER;

THENCE WESTERLY ALONG SAID NORTHERLY RAILROAD RIGHT-OF-WAY, BEING LOCATED WITHIN THE ROARING FORK RIVER THE FOLLOWING:

SOUTH 80 DEGREES 27'41" WEST, A DISTANCE OF 230.73 FEET;

SOUTH 83 DEGREES 46'38" WEST, A DISTANCE OF 96.97 FEET;

SOUTH 84 DEGREES 11'43" WEST A DISTANCE OF 99.20 FEET;

SOUTH 84 DEGREES 12'11" WEST, A DISTANCE OF 99.74 FEET;

SOUTH 84 DEGREES 12'20" WEST, A DISTANCE OF 99.08 FEET;

SOUTH 84 DEGREES 12'45" WEST, A DISTANCE OF 103.09 FEET;

SOUTH 84 DEGREES 06'14" WEST, A DISTANCE OF 97.41 FEET;

SOUTH 84 DEGREES 09'08" WEST, A DISTANCE OF 100.70 FEET;

SOUTH 84 DEGREES 53'34" WEST, A DISTANCE OF 96.53 FEET;

SOUTH 86 DEGREES 56'14" WEST, A DISTANCE OF 93.61 FEET;

NORTH 89 DEGREES 35'50" WEST, A DISTANCE OF 93.75 FEET;

NORTH 86 DEGREES 21'01" WEST, A DISTANCE OF 94.46 FEET;

NORTH 82 DEGREES 59'43" WEST, A DISTANCE OF 94.93 FEET;

NORTH 79 DEGREES 59'43" WEST A DISTANCE OF 95.24 FEET;

NORTH 77 DEGREES 47'12" WEST, A DISTANCE OF 97.04 FEET;

NORTH 77 DEGREES 19'56" WEST, A DISTANCE OF 99.76 FEET;

NORTH 77 DEGREES 10' 16" WEST, A DISTANCE OF 86.35 FEET TO A INTERSECTION WITH THE EASTERLY RIGHT-OF-WAY OF GARFIELD COUNTY ROAD 100;

THENCE NORTHERLY ALONG SAID EASTERLY RIGHT-OF-WAY THE FOLLOWING COURSES AND CURVES:

THENCE NORTH 36 DEGREES 10' 38" EAST, A DISTANCE OF 92.37 FEET;

THENCE ALONG A CURVE TO THE LEFT 145.86 FEET, THE RADIUS OF SAID CURVE BEING 340.27 FEET, THE CENTRAL ANGLE IS 24 DEGREES 33' 37", THE CURVE LONG CHORD BEARS NORTH 24 DEGREES 23' 49" EAST, A DISTANCE OF 144.75 FEET;

THENCE NORTH 12 DEGREES 07' 00" EAST, A DISTANCE OF 1490.00 FEET;

EXHIBIT A

THENCE ALONG A CURVE TO THE LEFT 296.07 FEET, THE RADIUS OF SAID CURVE BEING 1462.39 FEET, THE CENTRAL ANGLE IS 11 DEGREES 36' 00", THE CURVE LONG CHORD BEARS NORTH 06 DEGREES 19' 00" EAST, A DISTANCE OF 295.57 FEET;
THENCE NORTH 00 DEGREES 30' 48" EAST, A DISTANCE OF 727.56 FEET TO THE TRUE POINT OF BEGINNING.

COUNTY OF GARFIELD
STATE OF COLORADO

EXHIBIT B

RIGHT OF PROPRIETOR OF A VEIN OR LODE TO EXTRACT AND REMOVE HIS ORE THEREFROM SHOULD THE SAME BE FOUND TO PENETRATE OR INTERSECT THE PREMISES AS RESERVED IN UNITED STATES PATENT RECORDED August 11, 1894, IN BOOK 12 AT PAGE 333 AND RECORDED FEBRUARY 19, 1915 IN BOOK 71 AT PAGE 603.

RIGHT OF WAY FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES AS RESERVED IN UNITED STATES PATENT RECORDED AUGUST 11, 1894, IN BOOK 12 AT PAGE 333 AND RECORDED FEBRUARY 19, 1915 IN BOOK 71 AT PAGE 603.

EASEMENTS AND RIGHTS OF WAY AS GRANTED TO HOLY CROSS ELECTRIC IN INSTRUMENT RECORDED FEBRUARY 12, 1972 IN BOOK 427 AT PAGE 292 AND RECORDED OCTOBER 30, 1984 IN BOOK 659 AT PAGE 260.

EASEMENTS AND RIGHTS OF WAY AS GRANTED TO ROCKY MOUNTAIN NATURAL GAS IN INSTRUMENT RECORDED OCTOBER 19, 1961 IN BOOK 337 AT PAGE 236.

EASEMENTS AND RIGHTS OF WAY FOR PIPELINE AS CONTAINED IN INSTRUMENT RECORDED MARCH 14, 1962 IN BOOK 340 AT PAGE 26.

RESTRICTIVE COVENANTS, WHICH DO NOT CONTAIN A FORFEITURE OR REVERTER CLAUSE, BUT OMITTING ANY COVENANT OR RESTRICTION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN UNLESS AND ONLY TO THE EXTENT THAT SAID COVENANT (a) IS EXEMPT UNDER CHAPTER 42 SECTION 3607 OF THE UNITED STATES CODE OR (b) RELATES TO HANDICAP BUT DOES NOT DISCRIMINATE AGAINST HANDICAPPED PERSONS, AS CONTAINED IN INSTRUMENT RECORDED April 07, 1969, IN BOOK 401 AT PAGE 28.

TERMS, CONDITIONS AND PROVISIONS OF EASEMENT AGREEMENT RECORDED April 22, 1980 IN BOOK 547 AT PAGE 284.

ALL ACCESS RIGHTS TO HIGHWAY NO. 82 AS CONTAINED IN RULE AND ORDER RECORDED FEBRUARY 28, 1995 IN BOOK 932 AT PAGE 775.

EASEMENTS AND RIGHTS OF WAY FOR THE BASIN DITCH AND THE MIDDLE DITCH AND ALL LATERALS THEREOF.

EASEMENTS AND RIGHTS OF WAY FOR COUNTY ROAD 100.

EASEMENTS, RIGHTS OF WAY AND OTHER MATTERS AS SHOWN ON THE SURVEY PLAT DATED AUGUST 27, 2000 PREPARED BY LOUIS BUETTNER.

REPORT ATTACHMENTS

TABLE 1

Table 1 - Blue Creek Ranch Water Requirements

Table 1
Blue Creek Ranch
Estimated Water Requirements

Water Use Inputs

Domestic Demands			Commercial Demands			Other Demands		
# of Residential EQRs	50.0 EQRs		# of Commercial EQRs	2.0 EQRs		Pond Surface Area	1.90	acres
# persons/EQR	3.5 cap/EQR		# persons/EQR	3.5 cap/EQR		Annual Net Evaporation	2.59	ft
# gallons/person/day	100 gpcd		# gallons/person/day	100 gpcd		Livestock	20.00	units
Percent Consumed	5%		Percent Consumed	5%		Livestock Consumption	15.00	gpud
Lawn Irrigation	2500 sq-ft/EQR		Lawn Irrigation	2500 sq-ft/EQR		Irrigated Open Space	0.00	acres
Application Efficiency	70%		Application Efficiency	70%		Application Efficiency	70%	
Crop Irrig reqmnt (CIR)	1.99 ft		Crop Irrig reqmnt (CIR)	1.99 ft		Crop Irrig reqmnt (CIR)	1.99	ft

Water Use Calculations

Month	Diversion Requirements							Consumptive Use						
	(1) Domestic In-house (ac-ft)	(2) Commercial In-house (ac-ft)	(3) Dom\Comm Irrigation (ac-ft)	(4) Pond Evaporation (ac-ft)	(5) Live- stock (ac-ft)	(6) Total (ac-ft)	(7) Average Flow (gpm)	(8) Domestic In-house (ac-ft)	(9) Commercial In-house (ac-ft)	(10) Dom\Comm Irrigation (ac-ft)	(11) Pond Evaporation (ac-ft)	(12) Live- stock (ac-ft)	(13) Total (ac-ft)	(14) Average Flow (gpm)
January	1.665	0.07	0.00	0.00	0.029	1.76	12.8	0.083	0.00	0.00	0.00	0.029	0.12	0.8
February	1.504	0.06	0.00	0.09	0.026	1.68	13.6	0.075	0.00	0.00	0.09	0.026	0.19	1.6
March	1.665	0.07	0.00	0.18	0.029	1.94	14.2	0.083	0.00	0.00	0.18	0.029	0.30	2.2
April	1.611	0.06	0.27	0.45	0.028	2.42	18.2	0.081	0.00	0.19	0.45	0.028	0.75	5.6
May	1.665	0.07	1.61	0.67	0.029	4.04	29.5	0.083	0.00	1.13	0.67	0.029	1.92	14.0
June	1.611	0.06	2.04	0.89	0.028	4.63	34.9	0.081	0.00	1.43	0.89	0.028	2.43	18.3
July	1.665	0.07	1.93	0.91	0.029	4.60	33.6	0.083	0.00	1.35	0.91	0.029	2.37	17.3
August	1.665	0.07	1.25	0.79	0.029	3.81	27.8	0.083	0.00	0.88	0.79	0.029	1.79	13.0
September	1.611	0.06	1.06	0.53	0.028	3.29	24.8	0.081	0.00	0.74	0.53	0.028	1.38	10.4
October	1.665	0.07	0.34	0.31	0.029	2.41	17.6	0.083	0.00	0.24	0.31	0.029	0.66	4.8
November	1.611	0.06	0.00	0.11	0.028	1.81	13.6	0.081	0.00	0.00	0.11	0.028	0.22	1.6
December	1.665	0.07	0.00	0.00	0.029	1.76	12.8	0.083	0.00	0.00	0.00	0.029	0.12	0.8
Annual	19.600	0.78	8.50	4.93	0.34	34.15	21.12	0.98	0.04	5.95	4.93	0.34	12.23	7.55

Units

Zancanella & Associates, Inc.	10	Single Family Affordable Units	1.00	EQR/Unit	10.00
Water Resources Engineers	20	Single Family Freemarket Units	1.25	EQR/Unit	25.00
Glenwood Springs, CO	10	Single Family Large Lots	1.50	EQR/Unit	15.00
	10,000 Sq Ft	Commercial			2.00
		Total			52.00

TABLE 2

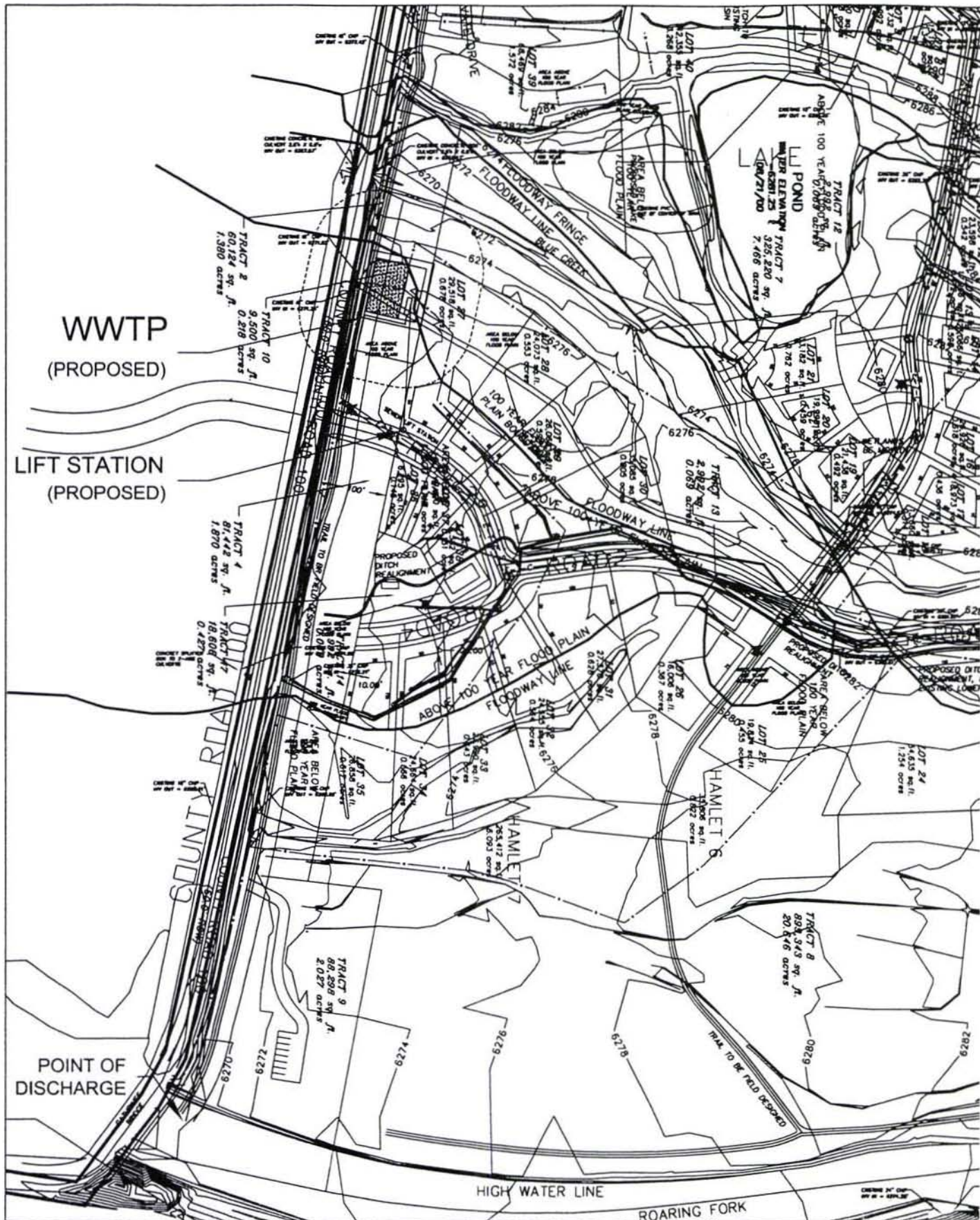
Table 2 - Development Schedule

Blue Creek Ranch Wastewater Treatment Plant

FIGURE 3

Figure 3 - WWTP Location

Blue Creek Ranch Wastewater Treatment Plant and Lift Station



WWTP LOCATION MAP			
SCALE: 1" = 200'	DATE: APRIL 17, 2001	SHEET: 3 OF 4	
DRAWN BY: DNM	CHKD BY: DNM	APPD BY: TAZ	DRAWING: BC_base2.dwg

BLUE CREEK RANCH

ZANCANELLA AND ASSOCIATES, INC.
ENGINEERING CONSULTANTS
 POST OFFICE BOX 1908 - 1005 COOPER AVENUE
 GLENWOOD SPRINGS, COLORADO 81602 (970) 945-5700

FIGURE NO.
3

PROJECT: 20725

TABLE 3

Table 3 - Wastewater System Operation and Maintenance Budget.

TABLE 3.

Wastewater System Operation and Maintenance Budget

Estimated Expenses at Full Build out	Cost/month	Cost/month/EQR
-biweekly visits to check on plant and lift station operation.	\$500.00	\$9.62
- testing and permitting.	\$100.00	\$1.92
- check sludge level in septic tanks once per year.	\$175.00	\$3.37
- pumping septic tanks and sludge hauling and disposal.	\$350.00	\$6.73
- office/accounting	\$100.00	\$1.92
- electrical costs.	\$500.00	\$9.62
- phone line for autodialier	\$40.00	\$0.77
Subtotal	\$1,765.00	\$33.94
20% Capital Fund	\$353.00	\$6.79
Total	\$2,118.00	<u>\$40.73</u>
Standby Charge		
- to be paid by owners of undeveloped lots.		\$15.00

Assumptions:

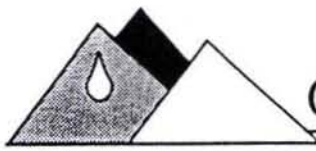
- (1) 52 total EQRs used by 40 residential and two nursery/tree farm units.
- (2) The sludge levels in the (40) septic tanks will be check annually.
- (3) Biosolid pumping, hauling and disposal will occur every three years.
- (4) Capital Fund is to be used for equipment repair and replacement.
- (5) Standby Charge is use to operate and maintain the system until full build out. Based on estimated EQRs.

APPENDICES

APPENDIX A

Manufactures' and Equipment Information

- 1) **Church & Associates, Inc. letter dated November 15, 2000.**
- 2) **Information on existing facilities from the Internet**



CHURCH & Associates, Inc.

ENGINEERS & GEOLOGISTS

November 15, 2000

Robert M. Cumming Jr.
19351 Highway 82
Carbondale, Colorado 81623

Subject: Onsite Wastewater System Evaluation
Ranch at Roaring Fork
Garfield County, Colorado
Job No. 13280

Dear Rob,

As requested through Tom Zancanella, we are providing preliminary information for a 20,000 gallons per day (GPD) Recirculating Filter System (RFS) for the proposed Ranch at Roaring Fork Project. The information is to be used as a part of an Application for Site Approval for a 50 equivalent residential unit development.

Per our site visit on October 26, 2000, the RFS is to be located in the western portions of the development area. There are several areas being considered. The preliminary information being provided is to assist in locating and defining the size of the proposed wastewater treatment system.


The typical area needed for a 20,000 GPD treatment system of a RFS is presented on the attached Figure 1. This includes the recirculation tank, recirculation pumps, gravel field and appurtenant piping. Not included are up-gradient septic tanks and piping nor down-gradient piping and disinfection prior to discharge to the river. Alternatives for septic tanks include individual septic tanks at individual homes, clustered septic tanks, or a single large septic tank near the recirculation tank.

For planning purposes, the cost of the RFS treatment unit as presented on Figure is estimated at \$8.00 per treated gallon or \$160,000.00. This includes equipment, excavation and labor costs. As the project proceeds, the costs can be refined. The most significant factor for this site is believed to be shallow ground water in the spring. The impact will dictate design consideration of the recirculation tank and the elevation of the recirculation field.

If you have questions or if we may be of further service, please call.

Sincerely,

CHURCH & Associates, Inc.


Edward O. Church, P.E.



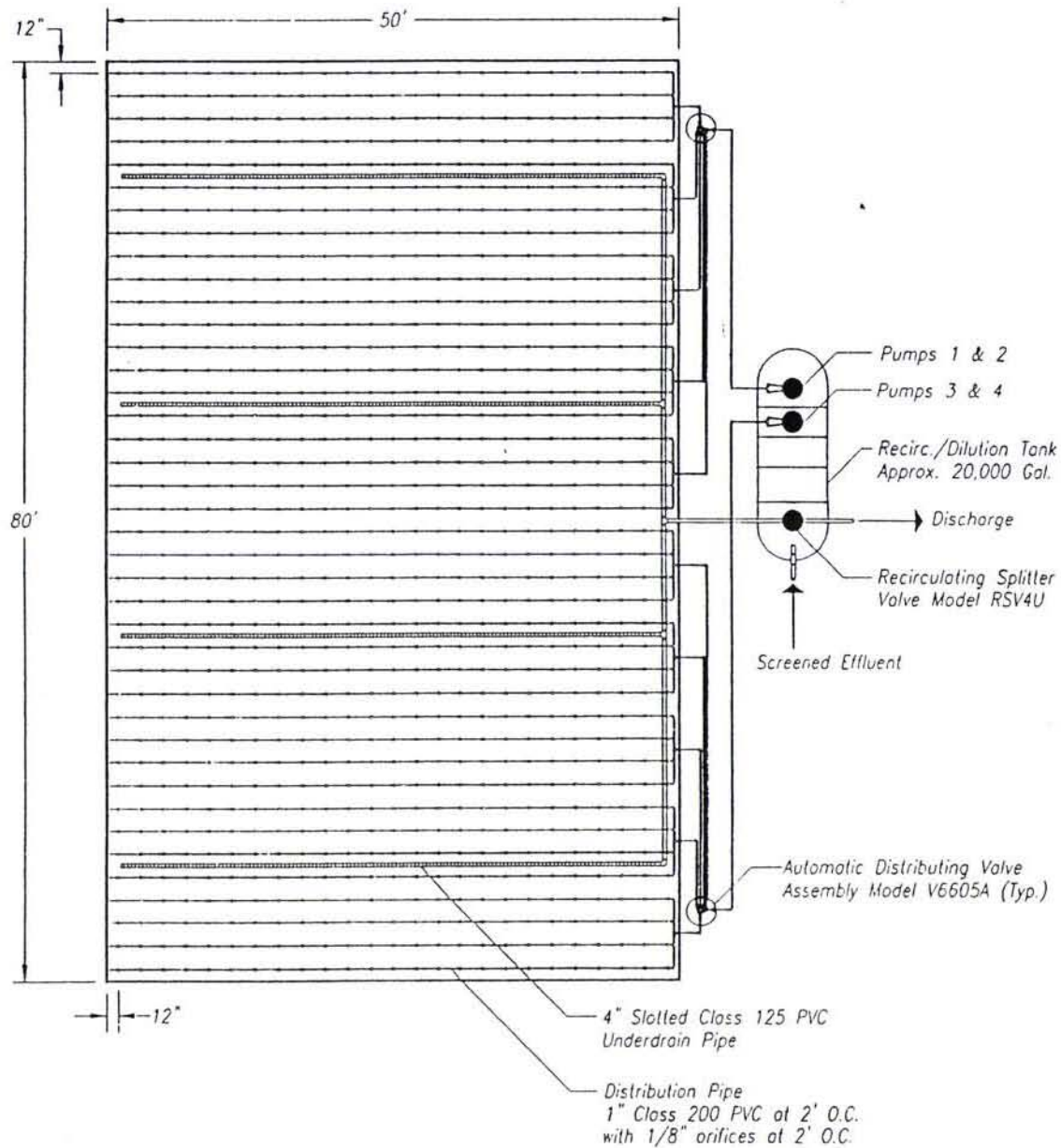
EOC

3 copies sent

Copy to Zancanella & Associates
1005 Cooper Avenue
Glenwood Springs, CO 81602

Recirculating Filter System - 20,000 gpd

LOADING RATE 5 GPD/FT²



Oreco Systems[®]
Incorporated

814 AIRWAY AVENUE
SUTHERLIN, OREGON
97479-9012

TELEPHONE:
(541) 459-4441
(800) 348-9843

FACSIMILE:
(541) 459-2884



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SCG Case Study

Sand Filter with Shallow Trenches:

In October 1997 an intermittent sand filter, followed by shallow trenches, was installed at a home in Fairplay, Colorado to repair a failing system.

The new residence was originally served by a septic tank and drain field bed installed in May 1996. When the first system quickly failed, a new, larger drain field bed was added. Within months, the repair system had failed.

Percolation test results found the upper 18 inches of soil had a percolation rate averaging 26 minutes per inch (MPI). At a depth of 3.5 to 4.0 feet, the percolation rate was greater than 240 MPI.

An intermittent sand filter system was installed to pre-treat the sand filter effluent, removing organic material

that may lead to bio-matting and decreased absorption capacity in the drain field. Shallow, chamber-type, pressure dosed trenches were installed to receive the sand filter effluent. The sand filter and drain field trenches have less than one foot of cover.

During the last two years we have periodically visited the site to monitor the system's performance. With every visit we found there was no ponding on the sand filter or in the drain field trenches. The sand filter effluent has been clear and odorless.

Please feel free to contact our office for more information on this system and our experience with sand filters at high altitudes and cold climates.





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SCG Case Study

Orenco[®] Recirculating AdvanTex[™] Filter:

In November 1999 an innovative new onsite technology was placed into operation at the Abbey of St. Walburga in Virginia Dale, Colorado. Groundwater discharge requirements dictated pretreatment of septic tank effluent prior to discharge to a subsurface drain field. Due to limited space available at the site, the desire for a low-profile, non-obtrusive, and low-maintenance system, a recirculating AdvanTex[™] Treatment System was chosen.

The 3000 gallon per day (GPD) system consists of a septic tank followed by a recirculation tank. Two pumps in the recirculation tank periodically dose septic tank effluent to the AdvanTex[™] filters for treatment. The treated effluent flows to a pump tank for dosing to a gravelless drain field with Infiltrator[®] chambers.



The AdvanTex[™] filters are developed and manufactured by Orenco Systems[®] Inc.

The filters consist of "textile coupons" with inherent properties that make them excellent for aerobic treatment of wastewater. A typical surface area application rate is 20 GPD per square foot of media.

Permitting Authority: Larimer County and CO State Health Departments
Project Engineer: JR Engineering
Installer: Left Hand Excavating

Please feel free to contact our office for more information on

Please feel free to contact our office for more information on this system and our experience with textile media filters at high altitudes and cold climates.

The AdvanTex™ Treatment System is covered by U.S. patent numbers 5,980,748; 5,531,894; and 5,492,635. Additional patents pending.

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SCG Case Study

20,000 GPD Recirculating Sand Filter:

During the Spring of 1999 a 20,000 gallon per day (GPD) recirculating sand filter was placed into operation to serve the Boy Scouts of America, Camp Alexander in Lake George, Colorado.

With a surface discharge to a "Gold Medal Stream" - the South Platte River, the recirculating sand filter technology was chosen for its high treatment capabilities and its minimal operation and maintenance requirements.



During the summer of 1999 the system's treatment performance was excellent with effluent testing showing an average BOD₅ and TSS of less than 10 mg/l and an average ammonia of less than 2 mg/l.

Permitting Authority: Park County and Colorado State Health Departments
Project Engineer: Stewart Environmental Consultants, Inc. - Tom Norman, P.E.
System Installer: Remedial Solutions, Inc.

Please feel free to contact our office for more information on this system and our experience with sand filters at high altitudes and cold climates.

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Below is a list of companies in Colorado that carry SCG Enterprises' products

Supplier	Address	City	Telephone
Grand Junction Pipe and Supply	740 Highway 133	Carbondale	(970) 963-5700
Colorado Springs Winwater	5595 East Bijou Street	Colorado Springs	(719) 572-0800
Firebaugh Precast Plastics, Inc.	3090 East Las Vegas 6255 Dexter Street	Colorado Springs	(719) 392-9036
The Plumbing Store, Inc.	50 No. Broadway	Commerce City	(303) 289-2557
Bowman Construction Company, Inc.	2310 South Syracuse Way	Cortez	(970) 565-6052
CPS Distributors, Inc.	4275 Forest St.	Denver	(303) 696-8960
Expert Piping Supply	3601 East 39th	Denver	(303) 394-6040
Great Western Pipe and Supply Co.	3860 Forest St.	Denver	(303) 321-8000
Colorado Pipe and Supply	4000 York Street	Denver	(303) 320-4440
Waterworks Sales Company	4295 Kearney Street	Denver	(303) 292-1548
Kemp and Company	P.O. Box 189	Denver	(800) 336-6135
Kamen Supply Co. Inc.	P.O. Box 2043	Edwards	(970) 926-3770
Dodson Engineered Products	P.O. Box 248	Ft. Collins	(970) 493-0982
Big R Manufacturing & Distributing	P.O. Box 1290	Glenwood Springs	(970) 945-2233
Western Pipe Supply	1841 Boston Avenue	Greeley	(303) 893-8480
Colorado Precast	1820 SE 14th Street	Longmont	(303) 651-9512
True Value Hardware	276 South Lena Street	Loveland	(970) 669-0535
Copeland Concrete, Inc.	28803 Highway 6	Ridgeway	(970) 626-5717
		Rifle	(800) 400-1132



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About SCG Enterprises, Inc.

SCG Enterprises has provided Onsite Wastewater System products and services to over 1000 residential homes and over 30 commercial facilities including schools, camps, lodges, convenience stores, gasoline service stations, and restaurants.

SCG Enterprises is the Colorado distributor for Orenco Systems[®] Incorporated (OSI); a research, engineering, and manufacturing firm dedicated to the development and production of the highest quality wastewater treatment products at the most reasonable price. OSI's product line includes the ProSTEP[™] septic tank effluent pumping system, sand filter packages, recirculating filter systems, and flow distribution equipment.

SCG Enterprises is the Colorado distributor for the Nibbler[®] wastewater treatment system; specializing in the treatment of high-strength wastewater typical of restaurants, supermarkets, meat processing plants, and bakeries. The Nibbler Lite[®] employs the patented Nibbler process for light commercial flows, and the Nibbler Jr.[®] provides treatment to residential or smaller commercial flows.

SCG Enterprises services include evaluation of existing systems and consultation to design engineers with respect to high strength waste considerations and distribution system design. We also perform compliance monitoring, and workshop training, as well as installation, operation, and maintenance services.

Representative Projects

The Fort Restaurant	Moffat Elementary	Sacred Hea
Berthoud Pass Ski Area	Peyton Elementary	Chief Hosa
Buffalo Bill Museum	Sedalia Elementary	Hog Heaven
TOTAL Service Stations	CONOCO Stations	Titan Indu
Camp Ilium	Western Convenience	Pine Enter

Pine Creek Cookhouse

Camp Alexander

O'Brien's

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Jefferson County Samples I.S.D.S

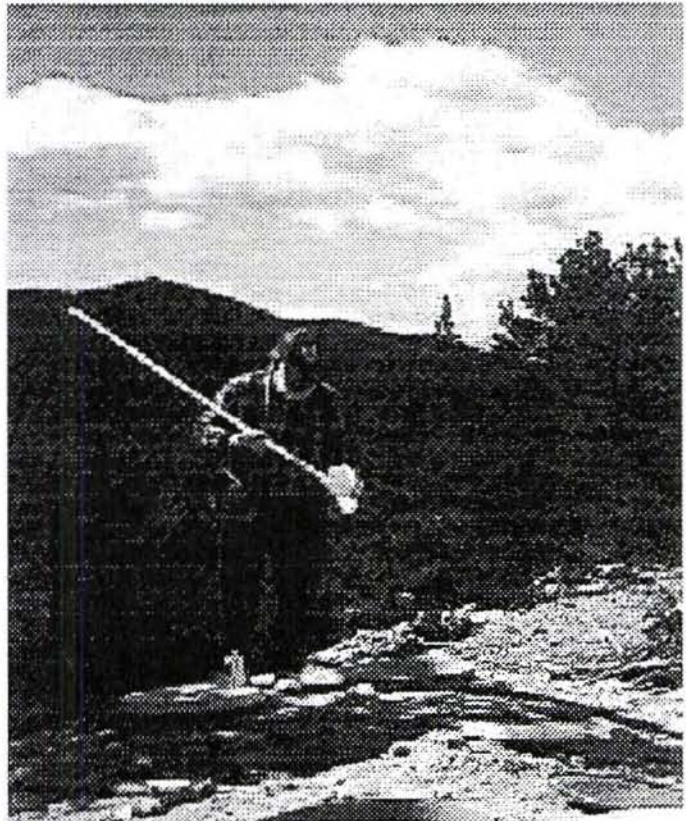
Once again, SCG Enterprises accompanied Jefferson County Department of Health and Environment personnel during the week of December 13, 1999 while sampling onsite wastewater systems.

Several onsite wastewater systems have been installed in Jefferson County with a 20-mg/l total nitrogen compliance limit. Three types of systems have been installed - they include traditional recirculating sand filters (RSF), recirculating sand filters with the sand filter effluent returned to the first compartment of the septic tank for denitrification (ST-RSF), and Orenco[®] septic tank trickling filters (TF).

The county has been performing quarterly sampling on these systems for over two years. Here are the results for the 11 systems sampled on September 13, 1999.

Total Nitrogen (mg/l)

RSF	ST-RSF	TF
12	7	11
9	13	12
40	10	66
12		
19		



Mike Davis with the Jefferson County Dept. Of Health

The TF system that did not meet the compliance limit has been repaired and scheduled for re-sampling in March 2000. The RSF system that did not meet the compliance limit has been converted to a ST-RSF system and was recently re-sampled.

Please feel free to contact our office for more information on this sampling program and the types of onsite wastewater system installations.

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Community Collection Systems

Effluent Sewers are becoming recognized as the best solution for collecting and transporting wastewater in small to mid-sized communities, new subdivisions, and environmentally sensitive areas. Effluent sewers are often one-fourth to one-half the cost of conventional gravity sewers. When properly designed, they are easy to install and maintain, and their treated effluent can be re-used for irrigation. Orenco's ProSTEP™ Effluent Sewers feature equipment that is superbly engineered, corrosion resistant, durable, lightweight, and fully warranted. ProSTEP™ Effluent Sewer packages include both pump collection systems (often called STEP systems) and gravity collection systems (often called STEG systems). Design assistance for engineers is included at no charge. Hundreds of communities across North America are successfully collecting and treating their wastewater with Orenco's ProSTEP™ Effluent Sewer Systems. For examples, click on "Case Studies."

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O R E N C O
C A S E S T U D Y

New Minden, Illinois:

State Agencies Amazed by Orenco Effluent Sewer and Recirculating Gravel Filter



The small farming community of New Minden, Illinois is attracting nationwide attention for its Orenco effluent sewer and recirculating gravel filter. Weekly EPA tests consistently show BOD & TSS levels below 3.0 mg/L and ammonia nitrogen levels below 0.5 mg/L.



"Between our firm and your distributor, we get calls every day about New Minden's effluent sewer and recirculating gravel filter. We put another Orenco effluent sewer in Eddyville, Illinois, and it's working great, too."

Bill Walker, P.E.
Walker Baker & Associates

When the Village of New Minden, Illinois built an Orenco effluent sewer with a recirculating gravel filter and began sending its monthly reports to EPA, agency officials thought someone might be "cooking the books." Or didn't know how to grab a good sample. Monthly BOD and TSS levels under 3 mg/L? Impossible!

So the agency sent its own people to perform unannounced and independent tests. The results were even better! Then the agency did another inspection, as a step towards statewide approval for Orenco-type filtered collection systems.

The Village of New Minden is an Illinois demonstration site: one of four communities selected by the state's "Rural Action Association" for installation of a cost-effective, alternative wastewater system. This small farming community had been plagued with wastewater problems — noxious odors and sewage in its ditches — and had had applications on file with various funding agencies for years.

Engineer Bill Walker, of Walker Baker & Associates, estimated the community could save money by installing an Orenco effluent sewer and recirculating gravel filter instead of a conventional sewer. The advantages of shallowly buried effluent sewer lines became immediately apparent, when testing revealed limestone bedrock 8'-12' below the surface! "Right then, we realized we'd saved a million dollars in excavation costs," said Walker.

Continued Walker, "We ran almost all our collection lines down alleys and across fields. When the state's Rural Development Director came to town for our dedication, he pulled me aside and asked 'When are you going to get this project finished?' I said 'It is finished.' He said, 'But when are you going to tear up the streets?' He couldn't believe we didn't have to!"

(Continued on back.)



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Installed in January, 1998, New Minden's wastewater system continues to astound critics. In addition to BOD and TSS levels below 3.0 mg/L, ammonia nitrogen is averaging a low, low 0.5 mg/L. One part-time maintenance person spends less than 1 hour/month on service calls, while flow meters show that power costs for effluent collection and distribution are averaging about 18 cents/home/month!

New Minden's effluent sewer project cost a total of \$1,200,000 and currently serves about 135 households and three commercial properties. Residents pay a base bill of \$18.80/month, with a small surcharge for usage in excess of 2,000 gallons. New installations run about \$3,000, not including a connection fee of \$300.

"The community is very happy with the way its new system is working," said Walker.

SUMMARY OF SPECIFICATIONS

New Minden, Illinois Effluent Sewer and Recirculating Gravel Filter Using Orenco Systems' Equipment

INSTALLATION DATE

January 1998

SYSTEM ENGINEER

Walker Baker & Associates, Harrisburg, Illinois

CONTRACTOR

Pensoneau Construction, Belleville, Illinois

ORENCO DISTRIBUTOR

Flo-Systems, Inc., Troy, Illinois

TOTAL PROJECT COST

\$1,200,000 (collection and treatment)

ON-SITE FACILITIES

138 EDU's, mostly residential
(9 STEP units, 129 STEG units)

22 duplex pump stations

TANKS

RESIDENTIAL

Mostly 1,000 gal concrete tanks with effluent filters (Constructed to specification)

COMMERCIAL

1,500 gal concrete tanks with grease trap
(Constructed to specification)

PUMPS

Collection: 1/2 Hp (10-25 gpm typical) turbine effluent pumps

Treatment: 3/4 Hp turbine effluent pumps

COLLECTION SYSTEM

Each lot has 1" service lines

TREATMENT SYSTEM

50' x 100' RECIRCULATING GRAVEL FILTER:

Design flows = 25,000 gpd

Average flows = 16,500 gpd

Design recirc ratio = 5:1

Actual recirc ratio = 4:1

Design loading rate = 5 gal/sq ft/day

Actual loading rate = 3 gal/sq ft/day

Two 12,500 gal recirculation tanks

Media Depth = 2'

Media effective size = 2.41 mm

Media Cu = 1.5

DISPOSAL

Recirculating gravel filter discharges to intermittent stream

OPERATION/MAINTENANCE

ONSITE FACILITIES

One part-time maintenance person

4 hr/wk preventative maintenance

1 hr/mo in service calls

Septic tanks monitored yearly

Expected sludge removal every 10-12 years, on average

TREATMENT SYSTEM

One part-time maintenance person

State of Illinois, Class I Operator

4 hr/wk

FEES

\$300 initial connection fee

\$3,000 initial installation costs

\$18.80 month base charge

Small surcharge over 2,000 gal/mo

TEST	INFLUENT	EFFLUENT
BOD ₅	140	2.1
TSS	47	2.5
NH ₃ N	—	0.5



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ACS-SL-3

Rev. 1.0, 10/99

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O R E N C O
C A S E S T U D Y

Elkton, Oregon:

Effluent Sewer Provides Superior Treatment at Low Cost



This aerial view shows the community of Elkton, Oregon, with its 100 residences, stores, restaurants and schools. Orenco's highly efficient recirculating sand filter is in the lower right corner (circled).



"The river is a big part of our lives, so protecting it is a priority. Orenco's recirculating sand filter does an excellent job at a cost we can afford."

Linda Higgins
Elkton City Manager

In the late eighties, individual onsite septic systems in Elkton, Oregon — along the beautiful Umpqua River — were failing, threatening the river's water quality. In addition the septic systems were limited in capacity, and merchants realized they couldn't expand their businesses without making improvements.

In 1989, Orenco installed a ProSTEP™ watertight effluent sewer system that conveys effluent from about 100 onsite septic systems — of which 1/3 are gravity (STEG) and 2/3 are pump (STEP) — to a 60' x 120' recirculating sand filter (RSF) designed to treat 30,000 gallons per day. Final disposal of the treated effluent is to a sequentially dosed drainfield consisting of 11,000 lineal feet, divided into 12 zones.

Effluent quality is outstanding. BOD and TSS from the ProSTEP collection system average 130 and 34 mg/L, respectively. After treatment by the RSF, effluent dosed to the drainfield averages 6 mg/L for both!

The cost to homeowners is minimal. After an initial \$400 connection charge, homeowners pay a low \$20 monthly fee that includes system payback and maintenance. That's because maintenance is also minimal, averaging less than an hour per day for routine maintenance to the collection system and for recording daily meter readings for the RSF and dosing pumps.

With a total system cost of \$897,800, the average installation was less than \$7,000 per connection. The community of Elkton found a cost-effective, environmentally sound solution to its wastewater treatment needs. And because only two-thirds of the systems' capacity is being used, Orenco's ProSTEP technology will serve Elkton long into the foreseeable future.



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SUMMARY OF SPECIFICATIONS

Elkton, Oregon Effluent Sewer and Recirculating Sand Filter Using Orenco Systems' Equipment

INSTALLATION DATE
1989

TOTAL PROJECT COST
\$897,800

ON-SITE FACILITIES
135 EDU's, mostly residential
67 STEP Units, 34 STEG Units

TANKS

RESIDENTIAL

1,000 gal, 1-piece construction, single-compartment concrete tank fitted w/effluent filters or screened pump vaults.

COMMERCIAL

Larger than 1,000 gal and/or multiple tanks.

PUMPS

1/2 Hp (10 gpm typical) effluent pumps.

COLLECTION SYSTEM

Main lines mostly 2" diameter, some 3".

TREATMENT SYSTEM

Recirculating gravel filter discharging to drainfield.

Q (Design) = 30,000 gpd
Q (Average) = 17,000 gpd
Actual RR = 3.2:1

29,500 gal recirculation tank, with four, 1 Hp pumps.

Per DEQ, Media depth = 35", D10 = 3.5 mm; Cu = 1.8 (Current standards provide for media depth of 24" and media size of 1.2-2.5.)

Flow splitter tank divides 20% of return flow to drainfield. During low flows, motorized valve actuates, resulting in 100% recirculation.

DISPOSAL

3,000 gal dosing tank with three, 1/2 Hp, 70 gpm pumps. Each pump doses to 4 valves that sequentially direct flow to hydrosplitter with 5 zones each.

127 (2") laterals with 1/8" orifices on 24" spacing, placed in 12" x 48" trenches.

11,000 LF drainfield is located within 6 acres.

EFFLUENT QUALITY

Influent BOD and TSS average 130 and 34 mg/L, respectively. Effluent averages 6 mg/L for both (see chart, below).

OPERATION/MAINTENANCE

ONSITE FACILITIES

Alarm calls average 3.7/yr. for first 7 yrs.
No residential tanks have needed pumping.

In 1996, a full audit was performed at each septic tank. Little maintenance was required.

COLLECTION SYSTEM

2 contract operators on-call.

TREATMENT SYSTEM

1 part-time operator; less than 1 hr/day, including daily meter readings (weekly would be adequate).

Per WPCF permit, effluent analysis performed quarterly.

RSF distribution laterals flushed annually (preventative maintenance).

FUNDING/FEES

71% grants, 29% loan

\$400 connection fee

\$20/mo/EDU for < 5,000 gpd flows

Additional \$4/1,000 gpd for > 5,000 gpd flows

\$175/mo flat fee for 2" commercial meters

New gravity installations cost about \$2,000

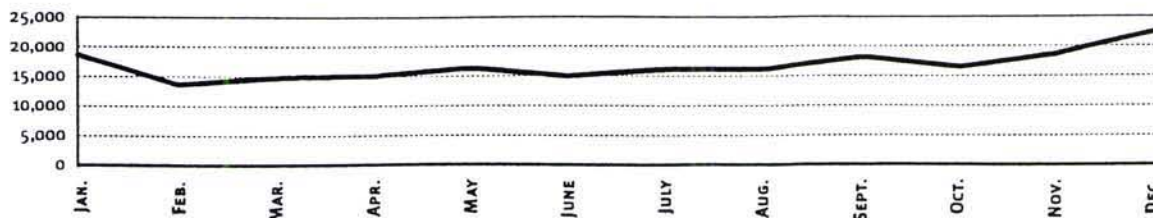
New pump system installations cost about \$3,000.

DATA COMPARING INFLUENT (I) TO EFFLUENT (E)

ANNUAL AVERAGE	BOD I/E	TSS I/E	NH3 I/E	NO3 I/E
1990	247/14	37/-	58/1	1/8
1991	116/7.5	25/4.0	33/3	1/11
1992	-/12.5	26/-	-/4	-/24
1993	134/4.3	40/5.1	56/11	3/26
1994	114/2.9	30/4.3	47/8	2/36
1995	122/3.9	40/11.0	50/9	1/30
1996	92/2.3	46/4.0	44/13	2/20
1997	128/5.5	38/7.7	41/8	3/14

BOD Biochemical Oxygen Demand TSS Total Suspended Solids NH3 Ammonia NO3 Nitrate

MONTHLY AVERAGE FLOW, GPD



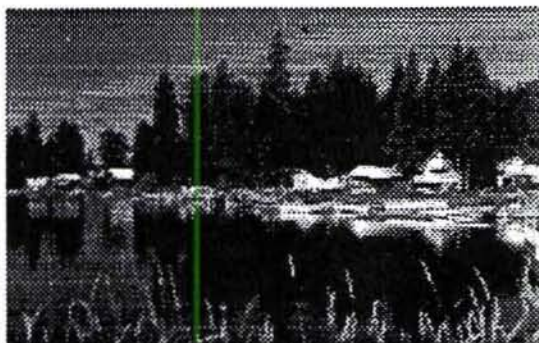
ACS-SL-1

Rev. 2.0, 9/99

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O R E N C O
C A S E S T U D Y

Diamond Lake, Washington:
12-Year Old Effluent Sewer Requires Little Maintenance



The community of Diamond Lake, in northeast Washington state, saved its beautiful 800-acre lake by replacing all its old, leaking septic tanks and inadequate disposal systems with watertight tanks and an Orenco effluent sewer system. Diamond Lake's wastewater system serves more than 500 homes, as well as one of the largest Boy Scout camps in the country.



"We're operating this system – water and sewer – with just two guys. More than 500 sewer customers and 600 water customers. It's easy to maintain."

Larry Garwood
Diamond Lake
Water & Sewer District

In the early 1970's, the residents of Diamond Lake, Washington knew that something had to be done about their wastewater. According to Bob McGowan, long-time member of the Diamond Lake Water & Sewer Commission, "Our lake was being destroyed by leaking septic tanks and failing drainfields."

The community needed federal funding assistance. Even so, "A gravity system was way out of reason," recalls Larry Garwood, system operator. After nearly 15 years of research and planning, the Commission decided on an effluent sewer and purchased ProSTEP™ pumping systems from Orenco.

Construction began in 1987. Installation went well but was not easy, since the soil was heavy clay, with high groundwater. In addition, about 25% of the excavation had to be blasted for the tanks and minimum 42"-deep collection lines. "If the engineers had known about the rock, the cost estimates for the gravity sewer would have been even higher," says Garwood.

More than a dozen years later, everyone is pleased with the system, according to Garwood and McGowan. All wastewater and water system maintenance is handled by just two operators. "The system is easy to learn and maintain," says Garwood. "We don't have many alarm calls. Pump motors never give us a problem, and the lines are performing well." (See "Operation/Maintenance" summary on back.)

Equally as important, wastewater services are very cost-effective, both for the district and its citizens. Customers pay \$15/month for residential properties and \$25/month for commercial properties.

Best of all, there's the lake. Within three years after Orenco's effluent sewer was installed, it was clear and clean again. "It recovered very early on," says Commissioner McGowan. "Diamond Lake is now a showcase." (Continued on back.)



Orenco Systems
Incorporated

800/348-9843

SUMMARY OF SPECIFICATIONS

Diamond Lake, Washington Effluent Sewer Using Orenco Systems' Equipment

INSTALLATION DATE
1987

TOTAL PROJECT COST
\$2,951,280 (excluding lagoon)
\$5,540 per home

ON-SITE FACILITIES
533 EDU's, mostly residential
529 STEP units, 4 STEG units

TANKS

RESIDENTIAL

1,000 gal single-compartment concrete tank with effluent filters or screened pump vaults.

Tanks were tested extensively for watertightness and structural integrity.

COMMERCIAL

Multiple 1,000 gal or 2,000 gal tanks.

PUMPS

1/2 Hp (8 gpm typical) turbine effluent pumps.

COLLECTION SYSTEM

Each lot has 1.5" - 2" service lines
6.5+ miles of 3" - 8" main lines

Effluent quality of collection system (measured at inlet of first lagoon):

BOD - -170± mg/L ('89-'91)
TSS - -40± mg/L ('89-'91)

TREATMENT SYSTEM

3-CELL AERATED LAGOON:

1 cell is 3/4 acre x 10.5' deep (on average)
2 cells are 3.75 acre x 16' deep
180,000 gpd design

Q (summer average) = 68,000 gpd
Q (winter average) = 45,000 gpd
37.9 million gallons winter storage capacity (on average)

DISPOSAL

410,000 gpd irrigation to 38-acre alfalfa field (Winter hold; summer irrigate)

OPERATION/MAINTENANCE

Entire system (wastewater and water) maintained by two full-time operators.

About 2 alarm calls per week (often for customer power failure).

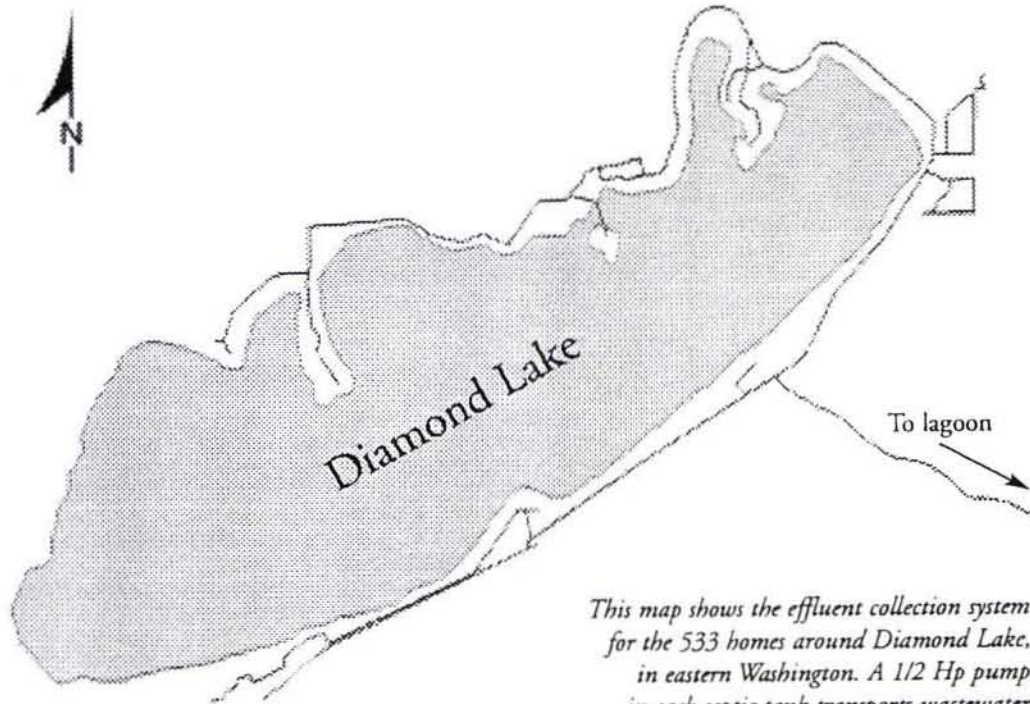
Average time spent at site for an alarm: 20 min.

Calls typically broken out as follows:

Screen cleanings: 30
Pumps (cleaning): 30
Miscellaneous: 20
Control panels: 11
Discharge assemblies: 10
Floats: 5
Service lines: 2
Pump motors: 1

FEES

\$15/month residential
\$25/month commercial



This map shows the effluent collection system for the 533 homes around Diamond Lake, in eastern Washington. A 1/2 Hp pump in each septic tank transports wastewater to an aerated lagoon, six miles distant, with no lift stations required.



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**DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS
FOR
BLUE CREEK RANCH P.U.D.**

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR BLUE CREEK RANCH P.U.D. is made this ____ day of 2001, by _____ ("Declarant").

1. DECLARATION - PURPOSES AND EFFECT.

1.1 General Purposes. Declarant is the owner of real property in Garfield County, Colorado described on Exhibit A attached hereto (the "Property") and subject to those matters set forth on Exhibit B attached hereto. Declarant desires to submit the Property to this Declaration as a Common Interest Community known as Blue Creek Ranch P.U.D. ("CIC") composed of one single family residence planned community, one wholesale tree farm storage operation, and one or more future communities as such development rights are reserved herein, to provide for the reservation of rights of Declarant pursuant to the Colorado Common Ownership Interest Act (the "Act"); and to presently establish within the Property the following:

This Declaration establishes certain rights and obligations with respect to the Property for Declarant and all present and future owners of the Property; including without limitation, (a) the creation of the Blue Creek Ranch Master Association for the acquisition or maintenance of projects common to the entire CIC which, although none exist at this time, may hereafter be acquired or established by the Board of Directors of the Blue Creek Ranch Master Association ("Executive Board") and (b) the creation of separate and distinct owner's associations by separate Declarations hereafter referred to as Specific Parcel Declarations and Specific Parcel Associations for the planned communities of _____, _____, _____ and any communities which may be hereafter created. Currently there are no expenses common to the entire CIC nor any real or personal property common to the entire CIC and therefore, no assessments may be levied by the Blue Creek Ranch Master Association without the acquisition of a common project, common maintenance obligations or property pursuant to the procedures hereinafter described. Declarant intends that such owners, mortgagees and any other person or entity now or hereafter acquiring any interest in the Property shall hold their interests subject to the rights, privileges, obligations, and restrictions established by this Declaration. All such rights, privileges, obligations and restrictions are declared to be in furtherance of a plan to promote and protect the value, desirability and attractiveness of the Property.

1.2 Declaration. Declarant hereby submits the Property to this Declaration and declares that the Property shall at all times be owned, used or occupied subject to the provisions of this Declaration as a planned community consisting of _____ separate planned communities and one or more future communities if such are created pursuant to the reservation of rights, and the provisions of the Plat and the Land Use Plan which are incorporated herein by reference, which provisions shall constitute covenants running with the land and shall be binding upon and inure to the benefit of Declarant and any person or legal entity acquiring any interest in the Property.

2. **DEFINITIONS.**

The terms listed below, as used in this Declaration, shall have the meanings set forth as follows:

2.1 "Land Use Plan" means the Blue Creek Ranch Planned Unit Development Land Use Plan Plat recorded in the office of the Clerk and Recorder of Garfield County, Colorado, on ____, in Plat Book ____, Page ____, Garfield County records or as the same may be hereafter amended, which is incorporated by reference herein.

2.2 "Mortgage" means any mortgage, deed of trust or other security instrument creating a real property security interest in the Association Property, or any part thereof, or in any Lot, excluding any statutory, tax or judicial liens. "Mortgagee" shall include any grantee, beneficiary or assignee of a Mortgage, and "Mortgagor" shall include any grantor, trustor or a Mortgage. First Mortgagee means a Mortgagee having priority as a Mortgage against the property thereby but only if the Mortgagee of such Mortgage claims in a written notice delivered to the Association.

2.3 "Plat" means the Plat of the Blue Creek Ranch P.U.D. recorded in the office of the Clerk and Recorder of Garfield County, Colorado, on ____ in Plat Book ____ at Page ____ Garfield County records, or as the same may be hereafter amended.

2.4 "Property" means the real property described in Exhibit A attached hereto.

2.5 "Parcel" means the land described on the Plat as a Parcel and as further contained within the legal description set forth in Exhibit "A" only if such Parcel is included within this CIC. Said Parcel may be subject, as hereinafter provided, to the reservation of rights to annex, withdraw, create common elements or create additional units. If a parcel contains Lots, only the Lots shall be separately counted for the determination of the allocation of interests, allocation of common expense or membership in the Blue Creek Ranch Master Association.

In the event any Parcel or Lot is withdrawn or is conveyed as a common element to a Specific Parcel Association, that Lot or Parcel shall be deemed Specific Parcel Association Property and shall not be included as a Lot or Parcel for the purpose of allocation of interests, allocation of Blue Creek Ranch Common Expenses or membership in the Blue Creek Ranch Master Association. In the event a Parcel is developed as a planned community or condominium community, as such right is reserved in this Declaration, the allocation of interest, allocation of Blue Creek Ranch Common Expense or membership in the Blue Creek Ranch Master Association shall be determined by the number of Units or Single Family Lots created as such is defined in this Declaration and not as a Parcel.

2.6 "Single Family Lot" or "Single Family Lots" means the single family residential lots located within Parcel ____ described as Lots __ through __, inclusive, Blue Creek Ranch P.U.D.

2.7 "Lot" or "Lots" means the property so identified on the Plat as Lots that are a part of the Parcels and are not otherwise described in Paragraph 2.6. The permitted uses for the Lots are as set forth in the Land Use Plan and are subject to the reservation of rights as hereinafter set forth.

2.8 "Units" or "Unit" means the units that may be hereafter created as condominiums under the reservation of rights of Declarant.

2.9 "Owner" or "Owners" means the person or legal entity holding fee simple title to a Lot, Parcel, Unit, or Single Family Lot as herein described.

2.10 "Blue Creek Ranch Declaration" or "Declaration" means this Declaration of Covenants, Conditions and Restrictions for Blue Creek Ranch P.U.D. or as the same be hereafter amended.

2.11 "Blue Creek Ranch Master Association" or "Master Association" means Blue Creek Ranch Master Association, Inc., a Colorado non-profit corporation, and its successors and assigns, agents and employees. Pursuant to the Act at Section 3 8-33.3-220 (4) and (5) and the Articles and Bylaws, the members of the Executive Board of each Specific Parcel Association shall, by reason of holding that office, be the voting members of the Master Association.

2.12 "Blue Creek Ranch Association Property" means any real property or personal property which may hereafter be owned, leased or maintained by the Blue Creek Ranch Master Association for the use, enjoyment and benefit of the Owners pursuant to the provisions of this Blue Creek Ranch Declaration; provided, however, at this time there is no existing Blue Creek Ranch Association Property for which any assessment may be levied.

2.13 "Blue Creek Ranch Common Expenses" means the estimated and actual expenditures made or liabilities incurred by or on behalf of the Blue Creek Ranch Master Association, together with any allocations to reserves, as may be established through the Executive Board of the Blue Creek Ranch Master Association as hereinafter provided.

2.14 "Specific Parcel Declaration" means any Declaration of Covenants, Conditions and Restrictions recorded hereafter with respect to only that specific Parcel included within the CIC.

2.15 "Specific Parcel Association" means any separate homeowners association established for the management, ownership and use of property held in common by virtue of ownership or commonality of expense obligation which concern only that specific Parcel included within the CIC.

2.16 "Specific Parcel Association Property" means any real property or personal property owned or maintained by a Specific Parcel Association created for the management, ownership and maintenance of such Association Property for the exclusive benefit of the members of the Specific Parcel.

2.17 "Articles" means the Articles of Incorporation of the Blue Creek Ranch Master Association, Inc. as amended from time to time.

2.18 "Bylaws" means the Bylaws of the Blue Creek Ranch Master Association adopted and amended by the Board from time to time.

2.19 "Board" or "Board of Directors" or "Executive Board" means the governing board of the Blue Creek Ranch Master Association.

2.20 "Declarant" means _____, and its successors and assigns specifically designated as such by an instrument executed by Declarant and recorded in the office of the Clerk and Recorder of Garfield County, Colorado.

2.21 "Maintenance" means such operation, management, maintenance, repair, renovation, restoration, or replacement of any Blue Creek Ranch Association Property as may be necessary to maintain such property in substantially the same condition as originally or subsequently constructed, altered or improved only if such property is acquired or obligation assumed as provided in this Blue Creek Ranch Declaration.

2.22 "Act" means the Colorado Common Interest Ownership Act, as in effect from time to time including any amendments to or replacements thereof. Any reference to a particular section of the Act shall include any amendments to or replacements of such section. When this Declaration makes reference to defined terms appearing in the Act such terms shall, unless otherwise provided, have the same meaning as provided in the Act.

2.23 "Visible From Neighboring Property" means, with respect to any given object, activity or condition, that such object, activity or condition is or would be visible to Owners within or upon the Property, and such object, activity or condition is not aesthetically pleasing, or in harmony with the surrounding improvements and the Project as determined by a majority of the Executive Board.

2.24 "Residence" means the residence constructed on any Lot

3. **PROVISIONS APPLICABLE TO THE DESCRIPTION AND USE OF THE PROPERTY.**

3.1 Use. The Property is described on Exhibit "A" incorporated by reference herein. The use of the Property shall comply with the Plat and the provisions of the Land Use Plan, this Declaration and any Supplemental Declarations hereafter provided for or authorized, all as incorporated by reference herein.

3.2 Method of Description.

(a) Lots Within Parcels or Parcels Without Lots. Every contract for the sale or conveyance of a Lot within a Parcel or the entire Parcel and every other instrument affecting title to a Lot within a Parcel or the entire Parcel may describe that Lot and/or Parcel by the designation shown on the Plat appearing in the records of the County Clerk and Recorder of Garfield County Colorado, in the following manner:

Parcel ___ or Lot ___, Parcel ___, Blue Creek Ranch P.U.D., according to the Plat recorded on _____, in Plat Book ___ at Page ___ and according to the Declaration of Covenants, Conditions and Restrictions for Blue Creek Ranch P.U.D. recorded on _____ in Book ___ at Page ___, COUNTY OF GARFIELD, STATE OF COLORADO.

(b) Single Family Lots in Parcel.

Lot ___, PARCEL ___, Blue Creek Ranch P.U.D., according to the Plat recorded on _____, in Plat Book ___ at Page ___ and according to the Declaration of Covenants, Conditions and Restrictions for Blue Creek Ranch P.U.D. recorded on _____ in Book ___ at Page ___, and according to the Declaration of Covenants, Conditions and Restrictions for Parcel ___ Blue Creek Ranch P.U.D. recorded on _____, in Book ___ at Page ___, COUNTY GARFIELD, STATE OF COLORADO.

(c) Such descriptions will be construed to describe the Lot, Parcel, and Single Family Lot, together with the appurtenant undivided interests in the common elements of any future Blue Creek Ranch Master Association Property as described herein and in the respective Declaration of Covenants, Conditions and Restrictions concerning the common property or elements of a specific parcel, and to incorporate all the rights incident to Ownership of the above and all the limitations on such Ownership as described in this Declaration, any amendments hereto and in the Declaration of Covenants, Conditions and Restrictions recorded for each parcel.

4. **RESERVATION OF RIGHTS TO DECLARANT.**

4.1 In order that Declarant's work may be completed and the Property may be established as a fully developed community, Declarant reserves the rights set forth in this Declaration with respect to the Property, lots and units which may be hereafter created, which rights shall be reserved to and remain vested in Declarant for fifty (50) years from the recording date of this Declaration, without restriction as to the order thereof, notwithstanding the conveyance of any part of the Property to the Blue Creek Ranch Master Association or Specific Parcel Association which may be hereafter created or the conveyance of the Lots, Parcels, Single Family Lots or Units by Declarant to any other persons or entities.

4.2 The right of Declarant, and its agents, employees and contractors, to enter upon the Property and to do whatever Declarant deems necessary or advisable in connection with the performance of the work to be performed by Declarant for the development of the Property, including, without limitation, the construction and installation of drainage and irrigation facilities, the installation of all utilities including trash storage and removal, the construction of all roads and bridges, the grading and landscaping of the Property, the construction of all other improvements to be constructed by Declarant, the erection or placement of temporary structures and the temporary storage of materials and fill dirt as may be reasonably necessary to facilitate the development of the Property, and the placement of such sign or signs on the Property by Declarant as Declarant may deem advisable in connection with the sale of, development of or construction on the Parcels, Lots, Single Family Lots or Units which may be conducted pursuant to this Declaration.

4.3 The right of Declarant to grant additional nonexclusive easements or licenses, and to relocate existing easements as shown on the Plat, including without limitation utilities, trash storage and removal, irrigation, drainage, grading, driveway access and similar purposes as may be reasonably required for the performance and completion of Declarant's development work; provided that no such easements shall be granted or relocated so as to encroach upon the Building Envelopes of the Lots, Single Family Lots or Parcels as shown on the Plat or Supplemental Plats which may be recorded hereafter.

4.4 The right of Declarant to develop and prescribe the uses of each Parcel, as existing or annexed in accordance with the Land Use Plan, and the ownership of common property or improvements located within specific Parcels within the CIC by the recording of a Specific Parcel Declaration identifying the boundaries of each Single Family Lot or Unit and the ownership and allocation of interests of common elements or property within that specific Parcel. In the event there are common elements or common property for the benefit and use of the owners of a specific Parcel, a Specific Parcel Association shall be created for the ownership and management thereof pursuant to the Act. Each Owner's fractional interest in such common property and common expense obligation shall be calculated by the total number of Single Family Lots or Units within that specific Parcel as the denominator and one as the numerator for each Single Family Lot or Unit within that Parcel.

4.5 The right of Declarant to develop, create, and sell ___ condominium units (hereafter "Condominiums") to be located on Parcel __ pursuant to the Land Use Plan or Plat and amendments thereto, which shall include the right to subject this Parcel to a Specific Parcel Declaration. Such Specific Parcel Declaration shall create a condominium community of ownership by the recording of a declaration and separate supplemental plat map defining the units of airspace, the common elements, if any, the allocation of interests in and to the common elements and in the common expense, and to create a separate homeowner s association to govern, own, insure, and manage and maintain the common elements contained within the specific Parcel or common property relating only to the specific Parcel.

4.6 The right of Declarant to add and annex Parcel ___ by recording a statement of intent to annex said Parcel to the Blue Creek Ranch CIC in accordance with the purposes described in the Land Use Plan. In the event such Parcel ___ is annexed to the CIC, Declarant may convey such Parcel ___ as a common element to a Specific Parcel Association created hereafter or to the Blue Creek Ranch Master Association.

5. PROVISIONS APPLICABLE TO PROPERTY.

5.1 Term Of Declaration. The term of this Declaration shall be perpetual.

5.2 Allocation of Interest. The allocations of interest with respect to the Specific Parcel Association Property of each Parcel shall be as designated within the Specific Parcel Declaration. The allocations of interest with respect to Blue Creek Ranch Association Property which may hereafter be acquired or maintained by the Blue Creek Ranch Master Association shall be determined by the number of total Lots, Parcels, Units, and Single Family Lots subject to the Blue Creek Ranch Master Association as the denominator and one as the numerator for each Lot, Parcel, Unit or Single Family Lot and shall be subject to the Articles and Bylaws of the Blue Creek Ranch Master Association as such may be amended from time to time.

5.3 Benefit of Owners. The Blue Creek Ranch Association Property, if any is conveyed to it by Declarant or otherwise acquired, or other maintenance obligations required pursuant to its powers set forth herein, shall be maintained and managed by the Blue Creek Ranch Master Association for the benefit of the owners for the uses and purposes set forth in the Land Use Plan. Appurtenant to each Lot, Unit, or Single Family Lot shall be a nonexclusive easement to use any Blue Creek Ranch Master Association Property hereafter acquired, subject to the right of the Blue Creek Ranch Master Association to reasonably limit and regulate the use of the Blue Creek Ranch Association Property by the Owners.

5.4 Easements. The Property shall be subject to the easements shown and described on the Plat and to such further easements as are provided for and/or authorized in this Declaration. The Blue Creek Ranch Master Association, upon acquiring ownership of any Blue Creek Ranch Association Property, shall have the right to grant easements with respect thereto, either public or private, in furtherance of the intents and purposes of this Declaration.

5.5 Emergency Access Easements. A nonexclusive easement for ingress and egress is hereby granted to all police, sheriff, fire protection, ambulance, and other similar emergency agencies or persons, now or hereafter servicing the CIC and its residents, to enter upon all private roads, driveway access easements and common driveways located in the CIC, and on any property in the CIC, in the lawful performance of their duties.

5.6 Compliance with Law. No Owner, his lessees, nor his family members and guests, shall do anything, or keep anything, in or on the Blue Creek Ranch Association Property which would be in violation of this Declaration, or any statute, rule, ordinance, regulation, permit or other validly imposed requirement of any governmental or quasi-governmental body.

5.7 Obligations for Maintenance and Management. The Blue Creek Ranch Master Association, upon acquiring ownership, maintenance or insurance obligations of any fixture Blue Creek Ranch Association Property, shall assume and perform all obligations for the Maintenance of the Blue Creek Ranch Association Property as provided for in this Declaration, and Declarant shall automatically be released from said obligations, subject to the limitations set forth in the Act. Such maintenance responsibility may be delegated by the Blue Creek Ranch Master Association to third parties subject to the terms of the Bylaws of the Blue Creek Ranch Master Association.

5.8 Revocation of Declaration. This Declaration may be revoked if all of the Owners of the entire Blue Creek Ranch P.U.D. agree to such revocation by an executed, acknowledged instrument recorded in the office of the Clerk and Recorder of Garfield County, Colorado. The prior written approval of each First Mortgagee of the Property will be required for any such revocation, except in the case of obsolescence, substantial destruction by fire or other casualty, taking by condemnation or eminent domain, or abandonment or termination provided by law.

5.9 Amendment of Declaration. This Declaration may be amended, if sixty-seven percent (67%) the Owners of the entire Blue Creek Ranch P.U.D. agree by an executed, acknowledged instrument recorded in the office of the Clerk and Recorder of Garfield County, Colorado. So long as Declarant owns any Lot, Parcel, Single Family Lot or Unit, no amendment to this Declaration may be made without Declarant's prior written consent. Nothing herein shall be construed to give rise to a right to amend or limit Declarant's reservation of rights and powers stated herein.

5.10 Binding Effect. Each Owner, his lessees, their families and guests and any other persons using or occupying a Single Family Lot, Units, Lots or Parcels shall be bound by and shall strictly comply with the provisions of this Declaration, Specific Parcel Declarations and the Articles of Incorporation and Bylaws which may be created hereafter by Declarant pursuant to this Declaration, any deed restrictions and covenants and all rules, regulations and agreements lawfully made by any applicable Association. If any court proceedings are instituted in connection with the rights of enforcement and remedies provided in this Declaration, the prevailing party shall be entitled to reimbursement of its costs and expenses, including reasonable attorneys' fees, in connection therewith.

6. THE ASSOCIATION.

6.1 Business and Membership. Except during the period of Declarant control, the Executive Board of Directors of each Specific Parcel Association shall elect an equal number of Directors to serve as the Executive Board of the Master Association as more specifically provided in the Bylaws. The number of Directors of the Blue Creek Ranch Master Association shall be no less than three (3) or a greater number as set forth in the Bylaws. All Owners shall automatically be members of the Blue Creek Ranch Master Association, and such membership shall automatically cease upon termination of the Owner's interest in his Lot, Parcel, Unit, or Single Family Lot, and shall be subject to the right of Declarant to appoint the Board of Directors of the Blue Creek Ranch Master Association as set forth below. Membership shall be appurtenant to a Lot, Parcel, Unit, and Single Family Lot and shall not be separately conveyed, encumbered or abandoned.

During the period of Declarant control as set forth in Paragraph 6.2, the Board of Directors of the Blue Creek Ranch Master Association shall consist of three persons who shall be appointed by Declarant. The Board of Directors need not be owners of the Lots, Parcels, Units, or Single Family Lots. The Blue Creek Ranch Master Association through its Board of Directors shall govern and manage the Blue Creek Ranch Association Property should any be acquired hereafter and shall enforce the provisions of this Declaration. During the period of Declarant control, Declarant shall be entitled to approve any and all actions of the Master Association. The Executive Boards of the Specific Parcel Associations, by a vote of sixty-seven percent (67%) of the quorum entitled to vote at any meeting, may remove any member of the Board with or without cause, other than any member of the Board appointed by Declarant.

6.2 Period of Declarant Control.

(a) Subject to the limitations of (b) below, Declarant shall have the right to appoint and remove members of the Board until the occurrence of either of: (i) sixty (60) days after conveyance of eighty percent (80%) of the Lots, Parcels, Units, and Single Family Lots that may be created to Owners other than Declarant; (ii) two (2) years after the last conveyance of a Lot, Parcel, Unit, or Single Family Lot by Declarant in the ordinary course of business; or (iii) two (2) years after any right to add Lots, Parcels, Units, or Single Family Lots is last exercised. Declarant may voluntarily surrender the right to appoint and remove Officers and Directors of the Board before termination of the foregoing period of Declarant control, but in that event, Declarant may require for the duration of the period of Declarant control that any action specified in the document by which Declarant voluntarily surrenders such rights be approved by Declarant prior to any such action becoming effective.

(b) In addition to the limitation on Declarant's right to appoint and remove members of the Board set forth in (a) above, sixty (60) days after conveyance of twenty-five percent (25%) of the Lots, Parcels, Units, or Single Family Lots that may be created to Owners other than Declarant, twenty-five percent (25%) of the Board shall be elected by the Executive Boards of the Special Parcel Associations, other than Declarant and sixty (60) days after conveyance of fifty percent (50%) of the Lots, Parcels, Units, or Single Family Lots that may be created to Owners other than Declarant, thirty-three and one-third percent (33 1/3%) of the Board shall be elected by the Executive Boards of the Special Parcel Associations.

6.3 Binding Effect. Each Owner, and his agents, lessees, invitees, guests, customers and any other persons using or occupying a Lot, Parcel, Unit, or Single Family Lot shall be bound by and shall strictly comply with the provisions of this Declaration, the Bylaws, the Articles, any deed restrictions and covenants and all rules, regulations and agreements lawfully made by the Blue Creek Ranch Master Association. The Blue Creek Ranch Master Association shall have the right and power to bring suit in its own name for either legal, equitable or injunctive relief for any lack of compliance with any such provisions. The failure of the Blue Creek Ranch Master Association to insist upon the strict performance of any such provisions or to exercise any right or option available to it, or to serve any notice or to institute any action, shall not be a waiver or a relinquishment for the future, of any such provision. An Owner aggrieved by lack of compliance may also bring suit for legal and equitable remedies. If any court proceedings are instituted in connection with the rights of enforcement and remedies provided in this Declaration, the prevailing party shall be entitled to reimbursement of its costs and expenses, including reasonable attorneys' fees, in connection therewith.

6.4 Power of the Blue Creek Ranch Master Association. Each Owner agrees that the Blue Creek Ranch Master Association has all the powers granted it by the Colorado Non-Profit Corporation Act and the Act and any amendments thereto or replacements thereof. Such powers shall include, without limitation, levying assessments against Owners with respect to Blue Creek Ranch Association Property only, imposing a lien on Lots, Parcels, Units, or Single Family Lots for any such assessments and foreclosing any such liens, enforcing any deed restrictions and covenants, and acquiring, insuring, holding, leasing, mortgaging or conveying Blue Creek Ranch Association Property, and the adoption of rules and regulations.

6.5 Maintenance of Blue Creek Ranch Association Property. The Blue Creek Ranch Master Association shall be responsible for Maintenance, insurance premiums, and operation of all Blue Creek Ranch Association Property should any be hereafter acquired as a Common Expense or as may be otherwise provided herein.

6.6 Additional Blue Creek Ranch Master Association Functions. The Blue Creek Ranch Master Association may undertake, to the extent the Board, in its sole discretion so elects, to provide any other function for the benefit of or to further the interests of all, some or any Owners on a self-supporting, special assessment, or general assessment basis. The Board shall determine, in its sole discretion, whether the expenses in connection with any such function shall be designated as Common Expenses or as charges allocated solely to Owners utilizing such services.

6.7 Fines. In addition to the enforcement actions provided herein, the Board shall have the right, after affording notice and an opportunity to be heard to an Owner, to fine the Owner, in a reasonable amount, for any violation of these Covenants. Any such amounts that an Owner is fined shall be deemed a personal obligation and/or lien against such Owner or that Owner's Lot, Lot, Parcel, Unit, or Single Family Lot and may be collected and foreclosed on in the same manner as is provided herein for the collection of common expense assessments, including reasonable attorney fees and costs.

6.8 Other Rights of the Blue Creek Ranch Master Association. The Blue Creek Ranch Master Association may exercise any other right, power or privilege given to it expressly by this declaration, the Articles and Bylaws, or by law, and every other right, power or privilege reasonably to be implied from the existence of any right, power or privilege given to it herein or reasonably necessary to effectuate any such right, power or privilege.

6.9 Certain Provisions Regarding Blue Creek Ranch Association Property. The Blue Creek Ranch Master Association may not convey or subject to a security interest any real property hereafter owned or leased by the Blue Creek Ranch Master Association without the prior written consent of eighty percent (80%) of all members of the Executive Board of the Specific Parcel Associations and with regard to any such conveyance of security interest shall otherwise comply with the provisions of the Act.

6.10 Notice to Maintain. An Owner shall immediately report to the Blue Creek Ranch Master Association the need for any Maintenance, which is the Blue Creek Ranch Master Association's responsibility to provide. In the event of any disagreement as to the need for or the responsibility of the Blue Creek Ranch Master Association to provide the Maintenance, the decision of the Board shall be final.

6.11 Mechanic's Liens. Declarant shall be responsible for the release of all mechanics' liens filed with respect to any hereafter acquired Blue Creek Ranch Association Property, or any part thereof, if any such liens arise or are alleged to arise from labor performed or materials furnished at the instance of Declarant, its agents, contractors or subcontractors. Except as the result of labor performed or materials furnished at the instance of the Board, no labor performed or materials furnished with respect to the Blue Creek Ranch Association Property or Lots, Parcels, Units, or Single Family Lots shall be the basis for filing a lien against the Blue Creek Ranch Association Property. No labor performed or materials furnished at the instance of the Board shall be the basis for filing a lien against any Lot, Parcel, Unit, or Single Family Lot.

7. ASSESSMENTS.

7.1 Obligation to Pay Assessments. Each Lot, Parcel, Unit, and Single Family Lot shall be subject to such general or special assessments as the Blue Creek Ranch Master Association may levy from time to time only with respect to Blue Creek Ranch Association Property or obligations which may hereafter be acquired or incurred. The assessments collected shall be used exclusively to promote the operation, administration, Maintenance and management of the Blue Creek Ranch Association Property, if any. Each owner shall be obligated to pay and agrees to pay all such assessments levied against his Lot, Parcel, Unit, or Single Family Lot and may not exempt himself from liability by waiver of the use and

enjoyment of the Blue Creek Ranch Association Property, or by an abandonment of his Lot, Parcel, Unit, or Single Family Lot.

7.2 General Assessments. General assessments shall be based upon a budget for a fiscal year to be designated by the Board and ratified by the voting members, as set forth in the Bylaws and shall include funds for the Blue Creek Ranch Common Expenses only with respect to Blue Creek Ranch Association Property, if any, and shall also include funds as a reserve for Maintenance which cannot be expected to occur on a regular annual basis. A brief summary of the annual budget shall accompany each general assessment notice as provided in the Bylaws. The failure of the Board to establish a budget for the next fiscal year before the expiration of any fiscal year shall not release the Owners from their obligation to pay any assessments or installments thereof for that or any subsequent year. The budget and assessment installments established for a preceding year shall continue until a new budget is fixed.

7.3 Special Assessments. Only if any Blue Creek Ranch Association Property is hereafter acquired and if the estimated cash requirements hereafter set forth in the budget prove to be inadequate for any reason, including non-payment of any Owner's assessment, or there are inadequate funds in the reserve, the Board may levy special assessments from time to time. This Section shall not be construed as an independent source of authority for the Board to incur expenses, but shall be construed to prescribe the manner of assessing for expenses authorized by other Sections.

7.4 Apportionment of Assessments. The amounts assessed pursuant to this Declaration as a common expense, shall be equally allocated and assessed among the Owners in accordance with their respective interest in and to the Blue Creek Ranch Association Property as set forth previously. Assessments that are attributable to only particular Lots, Parcels, Units, or Single Family Lots may be allocated, in the sole judgment of the Board, on an appropriate equitable basis to Owners utilizing such services.

7.5 Refunds. If in any fiscal year the assessments collected by the Board exceed Common Expenses incurred, the Board shall have the right, but not the obligation, to make refunds or give credits against future assessments. Refunds or credits shall be apportioned in the same manner as the general and special assessments, which created such surplus. Owners whose Lots, Parcels, Units, or Single Family Lots were subject to this Declaration for less than the full fiscal year shall receive only a proportionate refund or credit based upon the number of days the Lot, Parcel, Unit, or Single Family Lot was subjected to this Declaration. Any credit received by Declarant as an Owner under this Subsection shall be applied to another Lot, Parcel, Unit, or Single Family Lot owned by Declarant or, if there is no such Lot, Parcel, Unit, or Single Family Lot, shall be converted into a cash refund.

7.6 Assessments Adjustments. With respect to any assessment, credit or refund, the Board shall have the power to round off and make other minor adjustments of less than \$10.00 in each Owner's allocation for the following purposes: (i) to create whole round numbers for the convenience of the payor; or (ii) to correct any discrepancy between the total of each Lot, Parcel, Unit, or Single Family Lot's allocation of any such assessment, credit, or refund, and the total amount of either the expenses actually subject to assessment or the surplus actually available for a refund or credit.

7.7 Collection and Enforcement Remedies.

(a) All assessments or installments thereof, and fines which shall be deemed to be a part of the assessments shall be due and payable at the time or times designated by the Board by written notice delivered to the Owners. Overdue assessments shall bear interest at 18% per annum, or such other lawful rate or charge as the Board may determine from time to time. The payment of any assessment payable in installments may be accelerated by the Board for failure to pay any installment when due.

(b) An assessment shall be the personal obligation of the Owner at the time the assessment is levied against the Lot, Parcel, Unit, or Single Family Lot. A suit to recover a money judgment for unpaid assessments may be maintained against any Owner without waiving or otherwise prejudicing the Blue Creek Ranch Master Association's right to pursue any other remedy provided herein or established by law. The Blue Creek Ranch Master Association shall be entitled to recover the costs, expenses and reasonable attorneys' fees as additional sums due under any lien which may be filed or otherwise which are incurred in enforcing any action for payment of assessments or to enforce compliance with any provision contained herein including those set forth in the Land Use Plan or by Rule and Regulation adopted by the Blue Creek Ranch Master Association.

(c) The Blue Creek Ranch Master Association shall have a lien against a Lot, Parcel, Unit, or Single Family Lot for any assessments against the Lot, Parcel, Unit, or Single Family Lot that are due and unpaid from the date of the assessment. Costs of collection, including without limitation, reasonable attorneys' fees and other court costs, shall be added to the assessment lien amount. All amounts unpaid may be evidenced by a statement executed by the Blue Creek Ranch Master Association and recorded in the office of the Clerk and Recorder of Garfield County, Colorado. The assessment lien shall be a continuing lien upon the Lot, Parcel, Unit, or Single Family Lot against which any assessment is made. The assessment lien is prior to all other liens and encumbrances on a Lot, Parcel, Unit, or Single Family Lot except: (1) liens and encumbrances recorded before the recordation of the Declaration; (2) a first lien Mortgage on the Lot, Parcel, Unit, or Single Family Lot recorded before the date on which the Assessment sought to be enforced became delinquent; and (3) liens for real estate taxes and other governmental assessments or charges against the Lot, Parcel, Unit, or Single Family Lot. The assessment lien shall also be prior to the Mortgage described in (2) above to the extent of an amount equal to the assessment based on the periodic budget adopted by the Blue Creek Ranch Master Association which would have become due, in the absence of any acceleration, during the six months immediately preceding institution by either the Blue Creek Ranch Master Association or any party holding a lien senior to the assessment lien of an action or a nonjudicial foreclosure either to enforce or to extinguish the lien. This Section does not prohibit an action to recover sums for which this Section creates a lien or prohibit the Blue Creek Ranch Master Association from taking a deed in lieu of foreclosure. Sale or transfer of any Lot, Parcel, Unit, or Single Family Lot shall not affect the Blue Creek Ranch Master Association's lien except that sale or transfer of any Lot, Parcel, Unit, or Single Family Lot pursuant to foreclosure of any first lien security interest, or any proceeding in lieu thereof, including deed in lieu of foreclosure, or cancellation or forfeiture shall only extinguish the Blue Creek Ranch Master Association's lien to the extent required by the Act. No such sale, transfer, foreclosure, or any proceeding in lieu thereof, including deed in lieu of foreclosure, nor cancellation or forfeiture shall relieve any Lot, Parcel, Unit, or Single Family Lot from continuing liability for any Assessments thereafter becoming due, nor from the lien thereof

(d) For the purposes of this Section, the term "assessments" includes any amounts due in accordance with the terms of this Declaration.

The Blue Creek Ranch Master Association shall have the right to foreclose such lien in the manner provided by Colorado law for mortgages upon real property, to the appointment of a receiver and to the rental value of the Lot, Parcel, Unit, or Single Family Lot and its improvement during the period of delinquency through the period of foreclosure until expiration of the period of redemption. The Blue Creek Ranch Master Association shall have the power to bid on the Lot, Parcel, Unit, or Single Family Lot at a foreclosure sale and to acquire, hold, lease, mortgage and convey the same.

7.8 Grantee and Mortgagee Assessment Obligations. No Owner shall convey or mortgage his Lot, Parcel, Unit, or Single Family Lot unless and until all sums due the Blue Creek Ranch Master Association, whether or not evidenced by a recorded statement, are currently paid, but no Mortgage transaction shall be voidable by the Blue Creek Ranch Master Association nor shall the superior position of a First Mortgagee be adversely affected by a lien of the Blue Creek Ranch Master Association. At least five (5) business days prior to any conveyance or Mortgage, the Owner shall deliver written notice to the Blue Creek Ranch Master Association advising it of the proposed transaction and the names and addresses of all transferees and Mortgagees involved. If any assessment is due and owing by the Owner, his grantee or Mortgagee shall apply the proceeds of any such transaction to the payment of delinquent amounts due the Blue Creek Ranch Master Association before paying or disbursing any amount to the Owner. The grantee of a Lot, Parcel, Unit, or Single Family Lot shall be jointly and severally liable with his grantor for all unpaid assessments against the latter up to the time of the grant or conveyance, without prejudice to the grantee's right to recover from the grantor any amounts paid by the grantee therefor. Upon written request and payment of such reasonable fee as may be set by the Blue Creek Ranch Master Association, the Blue Creek Ranch Master Association shall issue a written statement to such grantee or mortgagee verifying the status of all assessments or charges affecting the Lot, Parcel, Unit, or Single Family Lot. Any statement as to the existence or amount of any delinquencies shall conclusively bind the Blue Creek Ranch Master Association. A First Mortgagee, who takes title to a Lot, Parcel, Unit, or Single Family Lot pursuant to the remedies in the deed of trust encumbering that Lot, Parcel, Unit, or Single Family Lot shall take such Lot, Parcel, Unit, or Single Family Lot free and clear of all unpaid assessments and the lien therefor.

7.9 Assessments for Tort Liability. Subject to the limitations set forth in the Act with respect to Declarant, in the event of any tort liability against the Blue Creek Ranch Master Association which is not covered completely by insurance, each Owner shall contribute for the payment of such liability as a special assessment in the proportion described in this Declaration. The Blue Creek Ranch Master Association may, however, require a larger contribution from fewer than all Owners under any legal or equitable principle regarding liability for negligent or willful acts or omissions.

7.10 Limited Liability.

(a) Except as otherwise provided in the Act or this Declaration for Board members and officers appointed by Declarant, neither the Blue Creek Ranch Master Association nor its past, present or future officers, directors, nor any other employee, agent or committee member of the Blue Creek Ranch Master Association shall be liable to any Owner or to any other person for actions taken or omissions made except for wanton and willful acts or omissions. Without limit to the foregoing, the Blue Creek Ranch Master Association and the Board shall not be liable to any party for any action or for any failure to act with respect to any matter if the action taken or failure to act was in good faith and without malice. Acts taken upon the advice of legal counsel, certified public accountants, registered or licensed engineers, architects or surveyors shall conclusively be deemed to be in good faith and without malice. To the extent insurance carried by

the Blue Creek Ranch Master Association for such purposes shall not be adequate, the Owners severally agree to indemnify the Blue Creek Ranch Master Association or Board against loss resulting from such action or failure to act, provided that the Blue Creek Ranch Master Association and the Board acted or failed to act in good faith and without malice.

(b) Any Board member or officer of the Blue Creek Ranch Master Association appointed by Declarant as provided for herein shall exercise in the performance of their duties the standard of care required of fiduciaries of the Owners.

8. INSURANCE.

8.1 Types of Insurance. The Blue Creek Ranch Master Association shall obtain and keep in full force and effect to the extent reasonably available, if appropriate and only if it acquires any Blue Creek Ranch Association Property or maintenance obligations, the following insurance coverage, individually naming Declarant, as an Owner, and each Owner as an additional insured:

(a) Property and fire insurance with extended coverage and standard all-risk endorsements, including vandalism and malicious mischief, of the Blue Creek Ranch Association Property. The total amount of insurance, after application of deductibles shall be 100% of the replacement value of the insured property exclusive of land, excavations, foundations and other items normally excluded from property policies.

(b) Public liability and property damage insurance, including medical payments insurance, in an amount to be determined by the Board from time to time, covering all occurrences commonly insured against for death, bodily injury and property damage arising out of or in connection with the ownership, operation or Maintenance, or other use of Blue Creek Ranch Association Property or maintenance obligations. This policy shall also cover operation of automobiles on behalf of the Blue Creek Ranch Master Association.

(c) Workmen's compensation and employees liability insurance in the amounts and in the forms required by law.

(d) Fidelity coverage against the dishonesty of employees, destruction or disappearance of money or securities, and forgery. This policy shall also cover persons who serve the Blue Creek Ranch Master Association without compensation.

(e) Coverage of members of the Board and officers of the Blue Creek Ranch Master Association against libel, slander, false arrest, invasion of privacy and errors and omissions and other forms of liability generally covered in officers and directors liability policies. Declarant and Declarant's designees shall be included as an additional insured in such Declarant's capacity as a Board Member.

(f) Coverage against such other risk of a similar or dissimilar nature as the Board deems appropriate.

8.2 Conditions of Insurance. Such insurance shall be at standard premium rates as established by the Colorado Insurance Commissioner and written with companies licensed to do business in Colorado having a Best insurance report rating of Class 6 or better. No policy shall be obtained where:

(a) contributions or assessments may be made against the Mortgagor (or Mortgagee's designee) under the terms of the insurance company's charter, bylaws or policy;

(b) by the terms of the carrier's charter, bylaws or policy, loss payments are contingent upon action by the company's board of directors, policyholders or members; or

(c) the policy includes any limiting clauses (other than insurance conditions) which could prevent Mortgagees from collecting insurance proceeds.

8.3 Named Insured and Interests. Policies of property insurance shall name the Blue Creek Ranch Master Association and each Owner as the insured, provided, however, the Blue Creek Ranch Master Association shall be the entity to which payment is to be made. The certificate or memoranda of insurance, duplicate originals of all policies and renewals, and proof of payment of premiums shall be issued to the Blue Creek Ranch Master Association, and upon request, to any Owner or Mortgagee.

8.4 Invalidation or Reduction of Coverage. Insurance policies carried must provide the following:

(a) that the insurer waives its right to subrogation under the policy against any Owner, any lessee and their families;

(b) that no act or omission by any occupant will void the policy or be a condition to recovery under the policy, unless that person is acting within the scope of his authority as an officer of the Blue Creek Ranch Master Association or as a member of the Board;

(c) that if, at the time of a loss under the policy, there is other insurance in the name of an Owner or any lessee covering the same property covered by the policy, the policy is primary insurance not contributing to the owners individual insurance; and

(d) that each Owner is an insured person under the policy with respect to liability arising out of such Owner's membership in the Blue Creek Ranch Master Association.

9. DAMAGE DESTRUCTION AND OBSOLESCENCE.

9.1 Insurance Proceeds. The Blue Creek Ranch Master Association shall receive the proceeds of any insurance described above purchased by the Blue Creek Ranch Master Association as the owner of the Blue Creek Ranch Association Property, if any. Any proceeds shall be used for the purpose of Maintenance, unless the Owners decide to terminate this Declaration in accordance with the provisions set forth herein.

9.2 Mandatory Maintenance In the event of damage or destruction due to fire or other disaster, if the insurance proceeds are sufficient to reconstruct the improvements, the Blue Creek Ranch Master Association shall promptly cause such Maintenance to occur. If the insurance proceeds are not sufficient for such purpose, the Blue Creek Ranch Master Association may levy special assessments against the owners for such deficiency pursuant to this Declaration.

9.3 Plan for Maintenance. Members holding two-thirds or more of the votes outstanding and entitled to be cast under the Bylaws may agree that the Blue Creek Ranch Association Property, or any part thereof, is obsolete and may adopt a written plan for Maintenance. The Blue Creek Ranch Master Association shall duly record such plan in the office of the Clerk and Recorder of Garfield County, Colorado.

9.4 Payment for Maintenance. The expense of Maintenance shall be payable by all of the Owners as Common Expenses. Assessments for the estimated cost of Maintenance shall be levied, allocated and collected as set forth in this Declaration. Further levies may be made in like manner if the amounts collected prove insufficient to complete the Maintenance. Dissenting Owners shall not be relieved of their obligation to pay their proportionate share of any Common Expenses. If the Blue Creek Ranch Master Association collects more money pursuant to this Section than is ultimately required for Maintenance, the Blue Creek Ranch Master Association shall return such excess to the Owners by a credit against the next installments of the annual assessment, or by a cash distribution to each Owner, in an amount proportionate to the respective amount collected from each Owner. The Blue Creek Ranch Master Association shall have full authority, right, and power to maintain, repair or replace the improvements on the Blue Creek Ranch Association Property notwithstanding the failure of an Owner to pay the assessment.

10. TAKING OF BLUE CREEK RANCH ASSOCIATION PROPERTY BY EMINENT DOMAIN.

10.1 Takings. If any portion of all of the Blue Creek Ranch Association Property is taken or condemned by any authority having the power of eminent domain, all compensation and damages on account of the taking of the Blue Creek Ranch Association Property, exclusive of compensation for consequential damages to affected Lots, Parcels, Units, or Single Family Lots shall be payable to the Blue Creek Ranch Master Association as Owner of the Blue Creek Ranch Association Property. Such proceeds shall be used promptly by the Blue Creek Ranch Master Association to the extent necessary for repair and reconstruction of such remaining Blue Creek Ranch Association Property in as substantial compliance to the original plan of development as possible. If there is an award in excess of the amount necessary to so substantially repair or reconstruct such remaining Blue Creek Ranch Association Property, it shall, at the Board's discretion, be either refunded or retained by the Blue Creek Ranch Master Association for such uses as it deems appropriate.

10.2 Declarant's Reserved Right. Declarant hereby reserves the right to receive any and all amounts awarded by any authority having the power of eminent domain, on account of the taking of the easement described as _____ on the Plat.

11. USE AND BUILDING RESTRICTIONS

In addition to all of the covenants contained herein, the use of the Property and each Lot, Parcel, Unit, Single Family Lot and Residences and other improvements constructed on any Lot is subject to the following:

11.1 Building Envelopes: Size Limitations: Design Factors and Constraints. All development activities undertaken or executed on the Lots, Parcels, Units, or Single Family Lots, including, but not limited to, construction of all Residences and accessory buildings, if any, and uses, shall be constructed only by Declarant, only as approved by Garfield County and only within the Building Envelope for such Lot (if any) shown on the Plat. No Residence may be expanded, modified, amended, repaired or replaced except to a size, style, design, appearance and location identical and as an exact duplicate to the Residence originally constructed by Declarant. No Residence may ever increase or modify its size to provide more above-grade living area than originally constructed. Square feet shall be measured as defined in the Garfield County Land Use Code.

11.2 Alterations, Additions and Improvements. Subject to the terms of this Declaration, any Owner may make internal non-structural additions, alterations, improvements and decorations within his Residence without the prior written approval of the Architectural Review Committee or the Executive

Board, but such Owner shall be responsible for any damage to other Lot or Residence, the Common Elements or the Property which results from any such alterations, additions or improvements. Notwithstanding the foregoing, no addition, alteration, improvement or decoration within a Residence, whether structural or not, shall be made without the prior written approval of the Architectural Review Committee if the addition, alteration improvement or decoration (including, but not limited to, any screens, foil or other window coverings except inside drapes, shutters and blinds) is Visible From Neighboring Property. Prior to granting such approval, the Architectural Review Committee must affirmatively find that the proposed addition, alteration or improvement is aesthetically pleasing, in harmony with the surrounding improvements and the Project and fully complies with any applicable scenic regulations. All artificial or replanted outside landscaping, including, without limitation, plants, plantings and the like, planted on or placed on or about a Lot or Residence which is Visible From Neighboring Property, is subject to Architectural Review Committee approval.

Within one year after any construction activity, including any alteration, addition or improvement, all disturbed slopes and any other part of a Lot shall have effectively been revegetated with plants and other vegetation indigenous to the area.

11.3 Fencing Prohibited. In order to maintain aesthetic quality within the Property, no Owner shall erect, maintain or suffer to exist a fence, wall or other structure of like nature on any Lot or upon any portion of the Common Elements, unless such fence, wall or other structure of like nature is specifically approved by Declarant or the Architectural Review Committee and consistent with all local codes and regulations.

11.4 No Mining, Drilling or Quarrying. The mineral rights underlying the Property are not owned by Declarant or the Owners. The owners of the underlying mineral rights have no right to access their minerals by or through any portion of the Property. To the extent Declarant has the legal right to so prohibit, mining, quarrying, tunneling, excavating, or drilling for any other substance within the earth, including oil, gas, minerals, gravel, sand, rock and earth, shall not be permitted within the Property. Excavating native quarry stone for on-site construction by Developer or its subcontractors is expressly permitted within the limits of the Property.

11.5 Resolutions of Board of Commissioners - Subdivision Improvements Agreement. All Owners shall adhere to the requirements set forth by the County of Garfield in granting P.U.D. approval to the Property as set forth in its (1) General Submission Resolutions, recorded _____, in Book __ at Page __; and (2) Subdivision Improvements Agreement between Declarant and the County of Garfield, recorded _____, in Book __ at Page __; all in the County Records.

11.6 Completion of Construction. Exterior construction of any Residence shall be completed and fully cleaned up within twelve months from its commencement. If such exterior construction is delayed from causes beyond the reasonable control of the construction contractor such as, but not limited to, acts of God, strikes, work stoppages, unavailability of or delay in receiving labor or materials, defaults by contractors or subcontractors, weather conditions, or fire or other casualty, then the time for completion of such exterior construction shall be extended for a period of time equal to the length of such delay or delays, but in no event beyond eighteen months. The Association shall have the right to enter upon any Lot and complete the unfinished exterior portion of the Residence and all costs associated with completion shall be reimbursed to the Association by the Owner. All unreimbursed costs shall be a lien upon the Lot until reimbursement is made. The lien may be enforced in the same manner as a lien for an unpaid Assessment levied in accordance with Article 10 of this Declaration.

11.7 Trees and Landscaping. There shall be no removal of natural vegetation on any portion of the Property other than by Declarant and then only as necessary to facilitate and accomplish construction

of wads, utilities, Residences, Common Elements and landscaping. Notwithstanding the foregoing sentence, there shall be allowed removal of natural vegetation for improvements necessary for the Trail Easement described above.

11.8 Drainage Control. Each Owner shall be responsible to maintain any and all perimeter drains and culverts and shall be responsible for any damage caused by failure to properly maintain these drains or culverts in a timely manner.

Section 11.9 No Material Slope Modification. Each Owner, by acceptance of a deed to his Lot acknowledges and accepts certain slope limitations within such Lot and within the Common Elements. Except as may be approved by the Executive Board and also except in compliance with applicable City or County rules and regulations, there shall be no grading, regrading, mass grading, cutting, filling or other material modifications of slope, whether done for drainage or for any other purpose.

11.10 Enclosure of Unsightly Facilities and Equipment. All unsightly structures, facilities, equipment and other items, including, but not limited to, those specified below, located or placed on any Residence or Lot shall be enclosed within the Residence or, subject to written approval by Declarant or the Architectural Review Committee enclosed in a solid, covered structure or screened from view. Any utility meter or other utility facility, gas, oil or water tank, service area, storage pile, or area for hanging clothing or other household fabrics on any Lot shall be enclosed or appropriately screened from view by planting or fencing approved by the Architectural Review Committee and adequate to render the same not Visible From Neighboring Property.

11.11 No Temporary Dwelling/Facility. No tent, shack, trailer, basement, garage, outbuilding or structure of a temporary character shall be used on any Lot at any time as a residence or for commercial/construction purposes, either temporarily or permanently, provided, however, that a construction trailer may be temporarily permitted upon a Lot during construction with the prior written consent of the Executive Board. In no event shall any garage, parking area, driveway or other building or structure, ancillary or appurtenant to a Residence be used as or converted to a living unit or occupied on either a permanent or temporary basis by any person or persons for living quarters or overnight occupancy of any kind, whether there is a fee paid or charged for the occupancy or not.

11.12 Storage. Nothing shall be stored in or upon the Common Elements or any Lot without the prior consent of the Executive Board. The Association shall have the right and power to prohibit storage or other activities deemed by the Executive Board to be unsafe, unsightly, unreasonably noisy or otherwise offensive to the senses on a Lot or the Common Elements and perceptible from another Lot or the Common Elements or otherwise Visible From Neighboring Property.

11.13 Animals. No animals, birds, fowl or livestock of any kind shall be raised, bred, or kept on any Lot, in any Residence or in the Common Elements, except that usual and ordinary household pets including, but not limited to, dogs or cats, may be kept on a Lot provided they are not kept, bred, or maintained for any commercial purposes, and are kept under strict control at all times and are further subject to the limitations of this section.

[Each Owner may keep no more than three household pets, except that (a) if the Owner's Residence has fewer than three bedrooms, then the maximum number of household pets for such Owner shall be equivalent to the number of bedrooms in his Residence, and (b) no Owner may keep more than two dogs.] Notwithstanding the foregoing, no pets may be kept by any Owner which result in an annoyance or are obnoxious to other Owners. Pets shall not be allowed loose or unsupervised on any part of the Property. No animal or bird shall be caged, chained or tied outdoors. No structure for the care, housing or confinement of any animal shall be maintained or suffered to exist.

No pets shall be allowed in the Common Elements except as may be permitted by rules of the Executive Board. No Owner shall allow his or her pet to enter the Common Elements except on a leash. After making a reasonable attempt to notify the Owner, the Association or any Owner may cause any unleashed pet found within the Common Elements to be removed by the Association (or any Owner) to a pound or animal shelter. Owners shall prevent their pets from soiling the Common Elements and shall promptly clean up any such soiling caused by their pets. Owners shall be fully responsible for any damage caused by their pets. When such conditions are created, the Owner may be assessed an amount for each separate incident (such amount to be determined by the Executive Board from time to time) for cleanup expenses by the Executive Board and the Executive Board or any Owner may seek enforcement or other relief as permitted by law and by this Declaration. Upon the written request of any Owner, the Executive Board shall conclusively determine, in its sole and absolute discretion, whether, for the purpose of this Section, a particular pet is a generally recognized household pet, or a nuisance. Any decision rendered by the Executive Board shall be enforceable in the same manner as any other restrictions contained in this Declaration. The Board shall have the right to prohibit maintenance of any specific pet that constitutes, in the sole and absolute discretion of the Executive Board, a nuisance.

11.14 Vehicle Restriction: Prohibition of Recreational Vehicles.

11.14.1 No automobile, motorcycle, motorbike, Recreational Vehicle (as defined in Section 11.14.4 below) or other motor vehicle of any kind, type or description shall be constructed, reconstructed or repaired on any Lot or any portion the Property, no inoperable vehicle may be stored or parked on any Lot or any portion of the Property (including streets dedicated to the City), and there shall be no storage of vehicles or overnight parking whatsoever in the driveways of Lots, Parcels, Units, or Single Family Lots __ through __, provided, however, that the provisions of this section shall not apply to: (i) emergency vehicle repairs or temporary construction shelters or facilities maintained during, and used exclusively in connection with, the construction of any improvements approved according to the applicable provisions of this Declaration; and (ii) vehicles parked in garages so long as such vehicles are in good operating condition and appearance and are not under repair. No automobile, motorcycle, motorbike, Recreational Vehicle or other motor vehicle or any kind, type or description shall be parked in the streets (whether public or private) or the Reciprocal Easement within the Property at any time. No trailer, camper, boat, motor home, Recreational Vehicle or similar equipment shall be permitted upon the Property for a period longer than is absolutely necessary to temporarily discharge or pick up Owners or their families.

11.14.2 **[There shall be no more than four cars (limited to two cars for one bedroom Residences) regularly parked on any Lot or near any Residence, provided that the Executive Board may give its written approval, upon good cause shown, and in a uniform and nondiscriminatory fashion, to an increased number of allowed vehicles per Residence so long as the provisions of Section 11.14.1 are not violated.]** All vehicles belonging to or used by an Owner or other lawful occupant of any Residence shall be parked only in designated garages and parking areas. Vehicles not owned or being used by an Owner shall be parked only in such areas designated by the Executive Board. Any vehicle which is parked in violation of this Declaration or of fire and safety or traffic and parking regulations of Garfield County, may be towed at the direction of Declarant, the Executive Board or their agents.

Whenever possible, a notice of intent to tow shall be placed on the vehicle for eight hours prior to towing, or for such period of time as is consistent with safe practices. The recording of this Declaration shall constitute legal notice of intent to tow, as though the Property were posted in accordance with state and local law.

11.14.3 Doors to garages must be kept closed at all times and approaches to them kept free of obstructions or other objects unless actual use of the garage doorway or approach is then being made.

11.14.4 "Recreational Vehicle" shall mean any vehicle, whether used for recreational purposes or not, classified by manufacturer as exceeding 3/4-ton, including without limitation, a mobile home, travel trailer, tent trailer, trailer, camper shell, detached camper, boat, boat trailer or other similar equipment or vehicle; provided, however, that the following shall not constitute "Recreational Vehicles" within the meaning of this Declaration if such vehicle is used on a regular and recurring basis for basic transportation of an Owner or of a lawful occupant of a Residence and meet the following criteria:

(a) Pick-up trucks of less than 3/4-ton capacity with camper shells, only if the same are of such a size and nature that they may be, and are, parked in a garage or designated parking space for a Residence; or

(b) Mini-motor homes only if the same are of such a size and nature that they may be, and are, parked in a garage or designated parking space for a Residence.

11.15 Commercial Activity. No gainful occupation, trade or other non-residential use shall be conducted on or in any Residence or Lot or about the Property except as specifically permitted hereby or by the Garfield County Code which permits limited home occupation uses. No person shall enter on the Property, or any Lot or Residences, for the purpose of engaging in such uses or for the purpose of receiving products or services arising out of such uses.

11.16 Nuisance. No nuisance shall be permitted to exist or operate upon any portion of the Property so as to be offensive or detrimental to any other portion of the Property or to any Owner, or otherwise Visible From Neighboring Property. Without limiting the generality of the foregoing, the following shall be presumed to be a nuisance in addition to any other conditions or actions specified in this Declaration:

(a) Rubbish, debris, building material or personal property of any kind which is placed or permitted to accumulate upon or adjacent to any Lot or Residence or any odors which arise therefrom, so as to render any such Lot or Residence or any portion thereof unsanitary, unsightly, offensive or detrimental to any other Lot or Residence in the vicinity thereof or to its occupants or to any Owner;

(b) Any exterior speakers, horns, whistles, bells or other sound devices, except security devices used exclusively for security purposes, the use of which devices must be approved, in writing, by the Executive Board;

(c) Any mineral collection, old bottles, fountains, stationary or permanent outdoor furniture or statuary, license plates or other memorabilia displayed so as to be visible outside a Residence or Visible From Neighboring Property. This provision shall be interpreted to preserve the aesthetic appearance of the Project and not to control the interior decoration of any Property; and

(d) Any use of a Lot, Residence or the Common Elements that will increase the rate of insurance upon any other Lot, Parcel, Unit, Single Family Lot, or the Common Elements.

The Executive Board in its sole discretion shall have the right to determine the existence of any nuisance, shall give notice to the Owner, and if the nuisance is not removed within the reasonable time

stated in the notice, shall have the nuisance removed and the costs for such removal shall be enforceable as an Assessment against such Owner's Lot.

Nothing contained in this Declaration shall prevent Declarant from storing building materials or from accumulating debris during the construction of Residences or improvements within or upon the Common Elements.

11.17 Diseases and Insects. No Owner shall permit any thing or condition to exist upon, in or about any Lot or Residence which shall induce, breed or harbor infectious plant or other diseases or attract noxious insects or wildlife.

11.18 Signs. No signs whatsoever including, but not limited to, commercial, political and similar signs shall be erected or maintained on any Lot or in any Residence which is Visible From Neighboring Property, whether in a window or otherwise, except:

11.18.1 Such signs as may be required by legal proceedings;

11.18.2 "For Sale" signs shall be allowed, provided they do not exceed five square feet in size. Only one such sign shall be permitted on any lot.

11.18.3 During a time of reconstruction or repair of any Residence or other improvement, no more than two job identification signs, each having a face area not larger than four square feet, or as required by statute;

11.18.4 Appropriate house number and mailbox identification all of which shall be placed, affixed and displayed in accordance with the Rules promulgated by the Executive Board; and

11.18.5 Such signs the nature, number and location of which have been approved in writing by the Executive Board.

Nothing contained in this Declaration shall be constructed to prevent the erection or maintenance by Declarant or its duly authorized agents of structures, Residences or other improvements or signs necessary or convenient to the development, sale, operation or other disposition of the Project or Lots, Parcels, Units, or Single Family Lots. In all cases, signs must comply with applicable laws and regulations.

11.19 Garbage and Refuse Disposal. All rubbish, trash, garbage and materials intended for recycle shall be regularly removed from the Lots, Parcels, Units, or Single Family Lots, and shall not be allowed to accumulate thereon. Trash, garbage and other waste shall not be stored except in containers made for their storage. All equipment for the storage or disposal of such materials shall be kept in a clean and sanitary condition, and shall be screened from view of neighboring Lots, Parcels, Units, or Single Family Lots, Common Elements and streets. Each Owner shall arrange the placement of his refuse bin or container for pick-up and the removal thereof from the street so as to be as reasonably close to the actual times of pick-up as is practicable, it being the intent that refuse containers shall be set or left on the streets or shall be Visible From Neighboring Property only for the minimum amount of time necessary to effect completion of the refuse, garbage, trash or recycling services described above. The Association shall arrange for trash, refuse and recycling services for the Property and the cost thereof shall be a Common Expense.

11.20 Radio and Television Signal Collection Devices; Solar Energy; Floodlights. No "satellite dish" or television or radio reception device, including, without limitation, antennas, aerials or other forms of signal or electromagnetic radiation collectors or detectors, nor any telescope or other like optical device, may be placed or located on, upon or about any Residence or the Lot on which it is situated, or on, upon or about a Residence or the roof or walls thereof if the same is or shall be Visible From Neighboring Property or in a manner causing substantial visual impact to, or interference with, others as determined by the Architectural Review Committee, without the advance written consent of the Executive Board. No alteration to or modification of an installed cable television system, shall be permitted. Federal rules with regard to communications antennas that would pre-empt the restrictions in this Section 11.20 shall have precedence.

All solar collection or energy devices or equipment, including, without limitation, solar water heaters, solar electrical generation units or solar ovens or cooking devices, placed on or located on, upon or about a Lot or on, upon or about a Residence or the roof or walls thereof and Visible From Neighboring Property shall be: (1) of a design, configuration and countenance which is a aesthetically pleasing and harmonious with the surroundings; (2) designed and installed in accordance with the Garfield County Land Use Code; and (3) reasonably approved by the Architectural Review Committee.

Except as initially installed by Declarant or approved in writing by the Architectural Review Committee, no spotlights, floodlights or other high intensity lighting shall be placed or utilized upon any Lot or any Residence erected thereon which in any manner will allow light to be directed or reflected on any other Residence, Lot or any of the Common Elements.

11.21 Liability of Owners for Damage to Common Elements. The Owner of each Lot shall be liable to the Association for all damage to the Common Elements (including landscaping) caused by such Owner or the Owner's Agents or pets, except for that portion of damage covered by insurance carried by the Association. The responsible Owner shall be charged with the cost (including interest thereon) of repairing such damage.

11.22 Unauthorized Vehicles. No person shall operate a motorcycle, snowmobile or other similar motorized vehicle upon any part of the Project, provided, however, that such restriction shall not prohibit the use of properly licensed vehicles on the private streets of the Project.

11.23 **[Burning of Fuel: Fireplaces.** No coal or other type of fuel which gives off smoke, except wood, propane and charcoal, shall be used for heating, cooking, or any other purpose within the Property unless approved by the Architectural Review Committee. No open fires or burning shall be permitted on the Property at any time and no incinerators or like equipment shall be placed, allowed or maintained upon the property unless approved by the Board, consistent with regulations imposed by the Garfield County Environmental Health Department. Any fireplace shall be a gas log appliance type. A certified non-polluting wood burning appliance may be otherwise approved by the Executive Board consistent with regulations imposed by Garfield Environmental Health Department. No woodpiles, compost or refuse heaps or piles nor any other like accumulation shall be placed or suffered to exist in and upon a Lot, Parcel, Unit, Single Family Lot or Residence at any time except for Executive Board-approved wood storage in or about a Residence.]

11.24 Machinery and Equipment. No machinery or equipment of any type, including, without limitation, heating, air conditioning or refrigeration equipment, shall be placed, allowed or maintained upon any Lot, Parcel, Unit, Single Family Lot or Residence except: (i) such machinery or equipment as is usual and customary in connection with the use, maintenance or construction (during the period of construction) of a Lot, Parcel, Unit, Single Family Lot or Residence, appurtenant structures or of any

other improvement; or (ii) that which may be required to perform the Association's operation and maintenance obligations without prior written approval and authorization of the Executive Board.

12. MISCELLANEOUS.

12.1 Declarant's Rights Transferable. Any right or interest of Declarant established or reserved in this Declaration may be transferred by Declarant either separately or with one or more of such rights or interests pursuant to the provisions of the Act.

12.2 Provisions Incorporated in Deeds. Each provision contained in this Declaration shall be deemed incorporated in each deed or other instrument by which any right, the or interest in the Property is granted, devised or conveyed, whether or not set forth or referred to in such deed or other instrument.

12.3 Number and Gender. Unless the context shall otherwise provide, a singular number shall include the plural, a plural number shall include the singular, and the use of any gender shall include all genders.

12.4 Interpretation. The provisions of this Declaration shall be liberally construed to effectuate its purpose of creating a uniform plan for the development of the Property subject to the Land Use Plan.

12.5 No Dedication. Nothing contained in this Declaration shall be deemed to be a gift or dedication of all or any part of the Property to the public or for any public use.

12.6 Notices. My notice permitted or required to be delivered as provided in this Declaration shall be in writing and may be delivered either personally or by mail. If delivery is made by mail, it shall be deemed to have been delivered 48 hours after a copy of the same has been deposited in the United States mail, postage prepaid for first class mail and addressed to the receiving party at the address appearing in the tax records of Garfield County, Colorado or if not, so designated to its last known address.

12.7 Mortgage Notice Rights. Any First Mortgagee will, upon request, be entitled to:

(a) inspect the books and records of the Blue Creek Ranch Master Association during normal business hours; and

(b) receive financial statements of the Blue Creek Ranch Master Association certified by the Blue Creek Ranch Master Association within 90 days following the end of any fiscal year.

12.8 Disbursement or Proceeds. Upon revocation of this Declaration, the Blue Creek Ranch Association Property shall be sold by the Blue Creek Ranch Master Association, in whole or in parcels, as the Board may deem appropriate. All sales proceeds and all amounts recovered under any insurance policy shall be allocated among the Owners in the same proportion as is set forth in Sections 5.2 and 7.4 hereof. The funds shall be disbursed, without contribution from one Owner to another, by the Blue Creek Ranch Master Association for the following purposes and in the following order:

(a) payment in full of the customary expenses of sale;

(b) payment in full of the allocable taxes and special assessment liens in favor of any governmental assessing entity;

EXHIBIT A
LEGAL DESCRIPTION

EXHIBIT B
EXCEPTIONS