GARFIELD COUNTY
Building & Planning Department
108 8th Street, Suite 401
Glenwood Springs, Colorado 81601
Telephone: 970.945.8212 Facsimile: 970.384.3470
www.garfield-county.com

Blue, Jean
Blue Pit expansion
SUPA-2-10-6289

☒ **MAJOR IMPACT REVIEW**
☐ **MAJOR IMPACT REVIEW [AMENDMENT]**
☒ **SUP AMENDMENT** [Issued under the Zoning Resolution of 1978, as Amended]

GENERAL INFORMATION (Please print legibly)

- Name of Property Owner: The Delores (Dee) B. Blue Revocable Trust and Dee Blue
- Mailing Address: 404 County Road 104 Telephone: (___)___
- City: Carbondale State: CO Zip Code: 81623 Cell: (___)___
- E-mail address:___ FAX: (___)___

- Name of Owner's Representative, if any, (Attorney, Planner, Consultant, etc):
- Western Slope Aggregates, Inc.
- Mailing Address: 0403 Highway 133 Telephone: (970) 963-2296
- City: Carbondale State: CO Zip Code: 81623 Cell: (970) 379-0427
- E-mail address: smello@sopris.net FAX: (970) 963-2412

- Requested Use from Table 3-501 or 3-502: Extraction, processing and material handling of sand and gravel resources
- Street Address / General Location of Property: 14682 Highway 82, Carbondale, CO 81623
- Legal Description: See attached application materials (Exhibit C)
- Assessor's Parcel Number: 2393-254-00-265 & 285
- Existing Use: Agriculture and sand and gravel mining
- Property Size (in acres) 146.87 Zone District: Rural

Last Revised 10/6/09

Western Slope Aggregates

Blue Pit Expansion
Carbondale, CO

Amendment to Special Use Permit
Substantial Change Necessitating a Major Impact Review

Submitted February 2010

Prepared by:

Greg Lewicki And Associates, PLLC
11541 Warrington Court
Parker, CO USA 80138
Phone: (303) 346-5196
E-Mail: info@lewicki.biz
Fax (303)-346-6934

Blue Pit Expansion – Garfield County
Land Use Change Application – Major Impact Review

Appendices

INTRODUCTION

The existing Blue Pit is located approximately 2.5 miles east of Carbondale, CO on Highway 82. The Blue Pit is separated from the Roaring Fork River Valley by an 80' tall natural slope which remains after removing the gravel from an elevated alluvial terrace. Western Slope Aggregate has a lease with the landowner of parcels 2393-254-00-265 and 2393-254-00-285 which allows them to conduct mining operations north of this slope. The gravel deposit which is being mined was deposited by the Roaring Fork River and is greater than 100 feet thick. The groundwater level limits the mining of the deposit at approximately 90 feet deep in the expansion area and 60 feet in current permit area. The groundwater surface is estimated from the existing excavation and by exploration drilling conducted in the area.

The site has been mined since 1981 under the state Reclamation Permit # M-1981-207. Western Slope Aggregate has operated the site since 1991. The site expanded to an annual production rate of approximately 450,000 tons per year. The existing permit area is 82.70 acres; approximately 25 acres is still able to be mined. This application in 2010 is to allow for an expansion area of approximately 60 acres, all of which will be used for additional gravel mining. The existing reserves will be exhausted in approximately 9 years and Western Slope Aggregate wants to secure reserves further into the future. The expansion area is located directly adjacent to the existing operation and is shown the Vicinity Map which is included in Exhibit B.

Since Western Slope Aggregate has operated the Blue Pit, there have been no major complaints or violations. Western Slope Aggregate realizes that there are impacts associated with the expansion of the Blue Pit, especially to the homeowners north of the pit. Through the proposed mitigation measures, mining of the expansion area will minimize impacts and provide an excellent reclamation plan for the final site.

Application Form and Fees

Exhibit A

BALCOMB & GREEN, P.C.
ATTORNEYS AT LAW

EDWARD MULHALL, JR.

SCOTT BALCOMB
LAWRENCE R. GREEN
TIMOTHY A. THULSON
DAVID C. HALLFORD
CHRISTOPHER L. COYLE
THOMAS J. HARTERT
CHRISTOPHER L. GEIGER
SARA M. DUNN

DANIEL C. WENNOGLE
SCOTT GROSSCUP
CHAD J. LEE

P.O. DRAWER 790
818 COLORADO AVENUE
GLENWOOD SPRINGS, COLORADO 81602

TELEPHONE: 970.945.6546
FACSIMILE: 970.945.8902

WWW.BALCOMBGREEN.COM

KENNETH BALCOMB
(1920 – 2005)

OF COUNSEL:
JOHN A. THULSON

February 8, 2010

LETTER OF TRANSMITTAL

TO: ***VIA HAND DELIVERY***
Garfield County Building & Planning Department
108 Eighth Street, Suite 401
Glenwood Springs Colorado

FROM: Timothy A. Thulson

RE: **The Delores (Dee) B. Blue Revocable Trust and Dee Blue / Western Slope Aggregates, Inc.**

Submitted herewith, please find the following documents:

1) **Western Slope Aggregates, Inc.'s check #19038 in the amount of $525.00;**
2) **Consent to Application;**
3) **Major Impact Review / SUP Amendment Application for the Delores (Dee) B. Blue Revocable Trust and Dee Blue; and**
4) **Three (3) notebooks entitled "Western Slope Aggregates – Blue Pit Expansion – Amendment to Special Use Permit Substantial Change Necessitating a Major Impact Review, Submitted February 2010**

Received by: RECEIVED FEB 0 8 2010 GARFIELD COUNTY BUILDING & PLANNING **, February 8, 2010**

Thankyou

WESTERN SLOPE AGGREGATES, INC.
0304 HIGHWAY 133
CARBONDALE, CO 81623
(970) 963-9424

BANK OF COLORADO
901 GRAND AVE
BOX 520 9TH & GRAND
GLENWOOD SPRINGS, CO 81601
82-244/1070

19038

2-8-10

PAY TO THE ORDER OF Garfield County Treasure $ 525 00

Five Hundred Twenty Five and 00/100 DOLLARS

MEMO WSA Peimit

William M Roberts

⑈019038⑈ ⑆107002448⑆ 2630039764⑈

WESTERN SLOPE AGGREGATES, INC.

19038

I. GENERAL SUBMITTAL REQUIREMENTS

[The following general application materials are required for all Major Impact Review Applications in Garfield County. Application materials and review standards that are specific to an individual use (Mass Transit Facility, Extraction, Solid Waste Facility , etc,) are detailed in Sections 3-301 of Article III and Article VII of the Unified Land Use Resolution (ULUR) of 2008.]

A. Submit a completed and signed Application Form, an application fee, and a signed Agreement for Payment form.

B. A narrative explaining the purpose of the application and supporting materials that address the standards and criteria found in Articles III and VII of the Unified Land Use Resolution of 2008.

C. Copy of the deed showing ownership. Additionally, submit a letter from the property owner(s) if the owner is being represented by another party other than the owner. If the property is owned by a corporate entity (such as an LLC, LLLP, etc.) Please submit a copy of recorded "Statement of Authority" demonstrating that the person signing the application has the authority to act in that capacity for the entity.

D. Submit a copy of the appropriate portion of a Garfield County Assessor's Map showing the subject property and all public and private landowners adjacent to your property (which should be delineated). In addition, submit a list of all property owners, private and public, and their addresses adjacent to or within 200 ft. of the site. This information can be obtained from the County Assessor's Office. You will also need the names (if applicable) of all mineral interest owners of the subject property, identified in the County Clerk and Recorder's records in accordance with §24-65.5-101, et seq. (That information may be found in your title policy under Exceptions to Title).

E. Vicinity map: An 8 ½ x 11 vicinity map locating the parcel in the County. The vicinity map shall clearly show the boundaries of the subject property and all property within a 3-mile radius of the subject property. The map shall be at a minimum scale of 1"=2000' showing the general topographic and geographic relation of the proposed land use change to the surrounding area for which a copy of U.S.G.S. quadrangle map may be used.

F. A copy of the Pre-Application Conference form completed during the original Pre-Application Conference.

G. Submit 3 copies of this completed application and all the required submittal materials to the Building and Planning Department. Staff will request additional copies once the application has been deemed technically complete.

I. Major Impact Review Process

The following section outlines and describes the Major Impact Review process for the variety of uses that are governed by the Board of County Commissioners by the Unified Land Use Resolution of 2008 (ULUR). Please refer to Articles III and VII in the regulations themselves for a higher level of detail. [The following process is required

for applications for land use changes that are subject to Major Impact Review as defined in Table 3-501 or 3-502 in Article III.]

A. Outline of Process. The Major Impact Review process shall consist of the following procedures:

1. Pre-Application Conference (4-103 (A))
2. Application (4-103 (B))
3. Determination of Completeness (4-103 (C))
4. Evaluation by the Director/Staff Review (4-103 (E))
5. Public Hearing and Recommendation by the Planning Commission (4-103 (G))
6. Public Hearing and Decision by the Board of County Commissioners (4-103 (G))

B. Submittal Materials: The following materials shall be submitted with a Limited Impact Review application and are more fully defined in Section 4-502 of Article IV of the ULUR. The Director may waive or alter any of these requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfies applicable standards.

1. Application Form and Fees
2. Site Plan (4-502(C)(3))
3. Erosion and Sediment Control plan (4-502(C)(4))
4. Landscape Plan (4-502(C)(5))
5. Land Suitability Analysis (4-502(D))
6. Impact Analysis (4-502(E))
7. Improvements Agreement, if appropriate (4-502(I))

II. Major Impact Review Amendment Process

Any proposal to change conditions of approval or a site plan approved under these Regulations as a Major Impact Review permit shall require application to the Director for Amendment of a Major Impact Permit Approval. The Director shall review the application to determine whether the proposed change constitutes a substantial change to the Major Impact Permit approval pursuant to Section 4-107 of Article IV.

A. Outline of Process. The review process for a proposed Amendment of an Approved Major Impact Review shall consist of the following procedures.

1. Pre-Application Conference (4-103 (A))
2. Application (4-103 (B))
3. Determination of Completeness (4-103 (C))
4. Evaluation by the Director/Staff Review (4-103 (E))
5. Decision by Director (4-104(B)(5))
6. Public Hearing and Decision by the Board of County Commissioners (4-103 (G))

B. Submittal Materials: The following materials shall be submitted with a Major Impact Review Amendment application and are more fully defined in Section 4-502 of Article IV of the ULUR. The Director may waive or alter any of these requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfies applicable standards.

1. Application Form
2. Supporting documents necessary to evaluate the proposed revision(s)
3. Written Statement of proposed amendment(s) which includes how the requested amendment does not result in a substantial change defined here:

   Substantial Change. *A change to and existing approved land use resulting in one or more of the following:*

   1. *A change in land use category.*
   2. *A change in site design which increases*
      a. *The number of dwelling units.*
      b. *The maximum square footage of structures less than 10,000 sq. ft. over 100% and structures over 10,000 sq. ft. by 10%, if a maximum has been specified in a permit or approval.*
      c. *Projected traffic such that a highway access permit or an amendment to a highway access permit is required as a result of the change.*
      d. *The size of the land which is the subject of the permit or approval*
   3. *A change in land use which creates or increases the incompatibility of the use.*

I have read the statements above and have provided the required attached information which is correct and accurate to the best of my knowledge.

William M. Robert 2-8-10

(Signature of Property Owner) Date

GARFIELD COUNTY BUILDING AND PLANNING DEPARTMENT

PAYMENT AGREEMENT FORM

(Shall be submitted with application)

GARFIELD COUNTY (hereinafter COUNTY) and Western Slope Aggregates Property Owner (hereinafter OWNER) agree as follows:

1. OWNER has submitted to COUNTY an application for Major Impact Review (hereinafter, THE PROJECT).

2. OWNER understands and agrees that Garfield County Resolution No. 98-09, as amended, establishes a fee schedule for each type of subdivision or land use review applications, and the guidelines for the administration of the fee structure.

3. OWNER and COUNTY agree that because of the size, nature or scope of the proposed project, it is not possible at this time to ascertain the full extent of the costs involved in processing the application. OWNER agrees to make payment of the Base Fee, established for the PROJECT, and to thereafter permit additional costs to be billed to OWNER. OWNER agrees to make additional payments upon notification by the COUNTY when they are necessary as costs are incurred.

4. The Base Fee shall be in addition to and exclusive of any cost for publication or cost of consulting service determined necessary by the Board of County Commissioners for the consideration of an application or additional COUNTY staff time or expense not covered by the Base Fee. If actual recorded costs exceed the initial Base Fee, OWNER shall pay additional billings to COUNTY to reimburse the COUNTY for the processing of the PROJECT mentioned above. OWNER acknowledges that all billing shall be paid prior to the final consideration by the COUNTY of any land use permit, zoning amendment, or subdivision plan.

PROPERTY OWNER (OR AUTHORIZED REPRESENTATIVE)

William M. Roberts — 2-8-10

Signature **Date**

William M. Roberts

Print Name

Mailing Address: 0403 Highway 133
Carbondale, CO 81623

Statement of Qualifications
for
ENVIRONMENTAL SOLUTIONS, INC.

Steve Dahmer—Owner—Mr. Dahmer has more than 16 years of professional experience in the natural resource field. Included in his credentials are a variety of positions with the U.S. Forest Service, biological work at the Idaho National Engineering Laboratory, broad-based experience as the general manager and wildlife biologist for a large, working ranch near Vail, Colorado and a variety of experience in the consulting industry. One notable example of Mr. Dahmer's work began in 1995 when he took the helm of a failing cattle and sheep ranch and turned it into one of the most highly regarded examples of integrated wildlife/livestock management programs in the country. He accomplished this through a well-planned system of integrated resource management which sets overall land health and ecosystem function as the cornerstone from which all other resources are built. Included in his management program are economic enterprises and biological plans for cattle, sheep, hay, timber, range, fisheries and wildlife management. He developed several revenue-generating recreational enterprises on the property, including guided flyfishing, a nationally acclaimed sporting clays course and an award-winning hunting operation which participated in the Ranching for Wildlife program administered by the Colorado Division of Wildlife. In addition, Mr. Dahmer coordinated all US Forest Service, Bureau of Land Management and State Lands grazing permits attached to the ranch.

As a consultant, Mr. Dahmer has worked extensively with the US Forest Service, Bureau of Land Management, Colorado Division of Wildlife, numerous county planning departments, the US Army Corps of Engineers and the Natural Resource Conservation Service on a multitude of land-use decisions, regulations, permitting and management programs, and has implemented a wide variety of habitat projects on a number of private properties, including in-stream trout habitat improvement, development of water resources in dry habitats, creation of fisheries, selective timber harvest, brush management, big game food plot creation and controlled burns. Mr. Dahmer is experienced with the National Environmental Policy Act and has completed numerous studies and documents for federal agencies mandated under this legislation. He is also thoroughly familiar with the workings of the Clean Water Act, including the Section 404 permitting process. Mr. Dahmer has completed extensive wetlands training and has implemented numerous wetland delineations, mitigation plans and wetland restoration projects. Mr. Dahmer is also well versed in preparing annual budgets, project reports and study designs, as well as monitoring, data collection and analysis of biological inventories.

Mr. Dahmer has served on the Board of the Natural Resources Conservation Service, Eagle Soil Conservation District, the Muddy Creek Ecosystem Management Council, the Lower Colorado River Habitat Partnership Program Committee and has served as Vice-Chairman of the Burns Hole Wildlife Association. He has also served on the BLM Resource Advisory Council. Mr. Dahmer is a published freelance photographer specializing in wildlife and fisheries topics.

Mr. Dahmer's education includes a B.S. in Natural Resource Management and Technical Journalism from Colorado State University, and a M.S. in Fisheries and Wildlife Biology, also at Colorado State University.

Mr. Dahmer is currently a member of The Wildlife Society, Rocky Mountain Elk Foundation, the Mule Deer Foundation, Trout Unlimited and the Colorado Mule Deer Association.

Professional Services

Environmental Solutions, Inc. offers full-service natural resource review, consultation and planning specifically tailored to the Rocky Mountain region. We specialize in upland, wetland and riparian habitat site analysis, enhancement and remediation. We also provide an entire range of Natural Resource Consultation including:

Wildlife and Fisheries

- Inventory
- Monitoring
- Habitat Enhancement Planning, Design and Construction
- Land Management Plans (Integrated and Species Specific)
- Lake/Pond Design, In-Stream Habitat Improvement and Fisheries Management
- Threatened and Endangered Species Surveys
- Endangered Species Act (Section 7-Formal and Informal Consultation with US Fish and Wildlife Service)
- Nuisance Wildlife Management (Rural-Urban Interface)
- County Planning Departments 1041 Wildlife Review
- Wildlife Study Research Design
- Wildlife and Fisheries Homeowner Field Guides
- Biological Assessment
- Biological Evaluation
- Critical Habitat Analysis
- Wildlife and Fisheries Literature Review
- Funding Requests and Grant Writing
- Technical Reporting and Professional Opinions

Wetlands

- Delineation
- Permitting
- Restoration
- Mitigation Design and Implementation
- Clean Water Act (Section 404-Permit Compliance)
- Riparian Inventory and Management
- Stream Channel Design
- Aerial Photo Interpretation

Uplands

- Range Inventory and Monitoring
- Range Analysis
- Grazing Management / Planning
- Noxious Weed Control Planning
- Prescribed Fire Planning
- Carrying Capacity Estimates
- Soils Survey Analysis

Forestry

- Inventory and Monitoring
- Forest Fire Hazard Review/Fuel Assessment
- Timber Analysis
- Insect and Disease Diagnosis
- Harvest Planning

Related Services

- National Environmental Policy Act (NEPA) compliance
- Stormwater Management Planning and Permitting (SWMP)
- Baseline Resource Inventories for Conservation Easements
- Land Management--Economic Analysis, Goal Setting, Manager Training
- Mapping (Computer Aided Design)
- Conflict Resolution (Private Sector-Agency conflicts; Wildlife-Resource conflicts)
- Integrated Resource Management Planning
- Ecological Succession Analysis
- Natural Resource Project and Budget Management
- Marketing (Recreational, Natural Resources etc.)
- Professional Photographic Documentation
- Resort Community Open Space and Wildlife Planning
- Golf Course Open Space and Wildlife Planning
- Homeowner's Association Covenant Development
- Specific Environmental Clearance (e.g., Municipal, County, State and Federal)

We appreciate your interest in our company. Please feel free to contact us for further information:

Environmental Solutions, Inc.
600 CR 216
Rifle, CO 81650
(970) 618-6841 office
(970) 625-1673 fax
e-mail: sdahmer@mailcw.com

References Available Upon Request

Gregory C. Lewicki, P.E.

CERTIFICATION

- Miners Certification, Commonwealth of Pennsylvania
- MSHA Certified Impoundment Instructor
- Professional Engineer, State of Colorado, No. 20335

EXPERIENCE

Principal of Greg Lewicki and Associates, Denver, CO (Oct 87 to Present)

- Permitting and engineering activities for 90 coal, sand/gravel and metal mines in the U.S.
- Environmental and engineering planning, design and implementation at 45 western U.S. mines.
- Hydrologic designs for flood control, dams, stream restoration, sedimentation facilities.
- Water permits for wells, discharges, augmentation, wetlands, storm water, etc.
- Trip to Moscow Mining Inst. in Russia to demonstrate American reclamation practices.
- Detailed mine feasibility studies for a number of U.S. mines.
- Expert testimony for mine feasibility, road designs, flood issues and gravel pits.
- Site supervision of reclamation of 8 western coal mines, incl. structure removal, portal seals, backfilling, grading, drainage control, refuse piles, topsoiling and vegetation and bond release.
- Worked on large scale coal mine reclamation and water management project in India.
- Worked on various US mining claims involving locatability for limestone and gypsum.
- Worked on various US mining claims for gold prospects and feasibility.
- Conducted various market studies in Colorado for coal, gypsum and limestone projects.
- Mine tailings pile reclamation pile design, permitting, construction and reclamation.
- Surface & underground mine design, mining methods and equipment selection.
- Sediment control system and water handling design for many mines using various computer techniques such as SEDCAD, STORM, RUSLE, SURVCADD, HEC-RAS.
- Acid mine drainage passive treatment design and permitting using limestone and bacteria.
- Slope stability evaluation, design and permitting on many types of earth slopes.
- Baseline data gathering for large 12 sq. mi. surface coal mine in North Dakota.
- Wrote article in Coal Mining on coal mine reclamation and spontaneous combustion.
- Complete workstation applications in CAD and civil engineering.
- Toxic waste cleanup design for large western metal mine.
- Various environmental permits & county/municipal permits for coal mines, small gold mines and gravel pits. Environmental site assessments at various mines.
- PUD plans for various development projects.
- Mine seal design, permitting and installation & professional engineer seal reports.
- Reclamation bond calculations at more than 36 mine sites in the western U.S.
- Received 2 reclamation awards from Colorado Dept. of Minerals and Geology
- Mine environmental planning, hydrology and reclam. work for large Nevada gold mines.
- Trip to Univ. of Guadalajara to teach computer applications in environmental engineering. (All classes were taught in Spanish).

President and Director of Engineering and Permitting for Panorama Resource Svcs, Inc. Denver CO (May 83 to Oct 87)

- Complete mine permitting on various projects in the Eastern and Western United States.
- Cumulative hydrologic impact statements and probable hydrologic consequences for western coal mines.
- Spring and seep surveys, alluvial valley floor studies.

RESUME

Steve D. Dahmer
600 CR 216
Rifle, Colorado 81650
Phone: (970) 618-6841

GOALS

1. To promote long-range planning and wise use of natural resources on both private and public lands.

2. To enhance the quality and quantity of wildlife production on local, national and international scales.

3. To facilitate natural resources education and communication between individuals and organizations.

WORK EXPERIENCE

2003-09 **Owner: Environmental Solutions, Inc**; Start up environmental consulting firm providing services in the fields of wetlands, range, wildlife, fisheries, forestry and private land management. Specializing in full NEPA compliance, including BA/BE, MIS report documentation and full EIS project management, and Section 404 Clean Water Act compliance. Engage new projects, develop cost estimates and budgets, coordinate field work and project completion reports, supervise full-time and temporary employees, serve as project lead coordinating consultant teams on private, state and federal projects.

2000-03 **Director of Ecological Operations**; Engage new projects, develop cost estimates and budgets, coordinate field work, design and implement data collections, processing and analysis, generate progress reports and final project completion reports, complete all supporting documentation including tables, charts, maps and other supporting documentation. Serve as liaison between clients and local/state/federal agencies; handle permitting, public meetings, management program implementation and employee education. Projects included a wide range of topics including: terrestrial and aquatic habitat reclamation/enhancement; range management (data collections, analysis, planning, implement grazing systems and controlled burns); timber harvest design and implementation with wildlife emphasis; brush management for big game winter range; creation of fisheries; wetland delineation, permitting and mitigation; NEPA work for federal agencies, including BA/BE, T&E analysis and EA projects. NatureTech Consultant Services Corp, P.O. Box 2736, Grand Junction, CO 81502.

1994-00 **Ranch Manager/Wildlife Biologist**; Manage daily operations of the Piney Valley Ranch. In charge of cattle, sheep, hay, timber, fisheries and wildlife management, hunting, fishing and other recreation resources. Coordinate private grazing leases and all U.S. Forest Service, Bureau of Land Management and State Lands grazing permits. Supervise 15 full-time employees and 12 seasonal employees. Prepare project reports and expense sheets monthly. Evaluate project ideas, planning, design, budgeting and implementation. The Piney Valley Ranches Trust, P.O. Box 640, Vail, CO 81658 - William J. Post, Trustee

1992-94 **Master of Science--Wildlife Biology**; Independently secured funding for Master's degree program and completed class work at Colorado State University. Also completed project design and conducted field research. Colorado State University, Fort Collins, Colorado 80523 - Delwin E. Benson, Graduate Advisor

1991 **Freelance Writer/Photographer**; Freelance writing and photography specializing in wildlife and fisheries topics. Publication in Bugle, Montana Outdoors, and Deer and Deer Hunting magazines. Also tied custom flies professionally for numerous western flyfishing shops.

1990 **Project Coordinator--U.S. Forest Service**; Planned and supervised all steps involved in construction of the Colorado Trail including map interpretation, surveying, route and grade planning, wildlife, cultural, soil and watershed resource impact assessment, corridor cutting, tread building and final evaluation. Also handled all media contacts. U.S. Forest Service, Dillon Ranger District, 191 Blue River Parkway, Silverthorne, Colorado 80498 - Tom Healy, supervisor

1989 **Assistant Supervisor--U.S. Forest Service**; Supervised two employees and six volunteers on trail maintenance, improvement and construction in remote wilderness location; horse-packing, wilderness survival and advanced projects with hand tools. U.S. Forest Service, Dillon Ranger District, 191 Blue River Parkway, Silverthorne, Colorado 80498 - Tom Healy, supervisor

1988 **Forestry Technician--U.S. Forest Service**; Timber management, aspen regeneration projects, public communication and trail planning, construction and maintenance. U.S. Forest Service, Dillon Ranger District, 191 Blue River Parkway, Silverthorne, Colorado 80498 - Tom Healy, supervisor

1987 **Guide--Executive Adventures, Ltd.**; Guided clients on extended horse-pack trips into remote locations for photography, fishing and hunting. Executive Adventures, Ltd. Box 1218, Gunnison, Colorado 81230 - Warner Seeley, president

EDUCATION

January 1992 to May 1995	Colorado State University M.S. in Wildlife Biology Thesis Topic: Private Lands Wildlife Management/Big Game Population Biology
January 1987 to December 1991	Colorado State University B.A. in Agricultural Journalism Second Major: Natural Resources Management
September 1986 to December 1986	University of Montana Major: Journalism

ORGANIZATIONS AND OFFICES HELD

Bureau of Land Management—Resource Advisory Committee – Wildlife and Sportsman Representative
Headgate 83 Ditch Company - President
Natural Resources Conservation Service--Eagle Soil Conservation District - Board member
Burns Hole Wildlife Partnership - Vice Chairman and biological advisor
Lower Colorado Habitat Partnership Committee - Board member
The Wildlife Society - Associate Wildlife Biologist, Education Committee and Legislative Review Committee member
The Mule Deer Foundation – Local Chapter Board Member/Banquet Committee volunteer/Chapter Rewards Program habitat field work coordinator
Colorado Mule Deer Association - member
Trout Unlimited - Embrace-a-Stream project volunteer/frequent slide show presenter
Rocky Mountain Elk Foundation - Photo contributor to Bugle magazine, Eagle Valley Chapter donation committee, member
Ducks Unlimited - member
CSU Gymnastics Club - Co-founder, President, Secretary, Treasurer, Advisor
CSU Club Sports Association - Budget Committee member

AWARDS

1992	Colorado Graduate Fellowship - Wildlife Biology, Colorado State University
1991	Wildlife Leadership Award - Rocky Mountain Elk Foundation
1991	Associated Western Universities Fellowship - Wildlife Biology, Idaho National Engineering Laboratory
1990	Numerous photography awards
1989	Outstanding Achievement Award - U.S. Forest Service
1988	Outstanding Leadership Award - Colorado State University Club Sports Association
1986	U.S. National Journalism Award - American Scholastic Press Association
1986	Outstanding Yearbook Journalist - Josten's Publishing Company
1986	Best Yearbook Award - American Scholastic Press Association
1986	Who's Who Among American High School Students
1985	Who's Who Among American High School Students
1985	Quill and Scroll Award - International Honorary Society for High School Journalists

HOBBIES

Adventure travel, photography, mountain biking, gymnastics, fly-tying, fishing, hunting, birding, rock climbing, wood working, country dancing, downhill skiing

REFERENCES

Provided upon request

Kimley-Horn
and Associates, Inc.

Curtis D. Rowe, P.E., PTOE

Master of Science, Civil and Environmental Engineering, University of Nevada, Las Vegas
Bachelor of Science, Civil Engineering, University of Nebraska, Lincoln
Professional Engineer in Colorado, Nebraska, Nevada, and Wyoming
Professional Traffic Operations Engineer
Member, Institute of Transportation Engineers

With 16 years of experience, Curtis serves as project manager on a variety of transportation engineering projects for private and public sector clients. His experience encompasses traffic impact studies, access and circulation studies, intersection capacity analysis, signal design, traffic signal warrant studies, roadway design, roundabout design signing and marking, lighting design, Intelligent Transportation Systems (ITS) design, transportation planning, transportation demand management programs, and corridor analysis. Curtis has conducted over 400 traffic studies as well as prepared traffic engineering designs for over 50 intersections within the State of Colorado. Curtis is proficient in AutoCAD, HCS, Synchro™, SimTraffic, and Sidra programs.

4-502.C(2) Vicinity Map

Exhibit B

4-502.C(3) Site Plan **Exhibit C**

1. **Legal Description**
The Blue Pit is located approximately 2.5 miles east of Carbondale, CO. A legal description of the permit boundary is shown on Map C-1 which is included in Appendix B. The total Permit area is 146.87 acres.

A tract of land located in the Southern ½ of Section 25 Township 7 South Range 88 West 6th P.M and being more particularly described as follows:

Commencing at the southwest corner of said section 25,
thence N 00°00'58" W a distance of 1378.42';
thence S 89°58'01" E a distance of 1220.82';
thence N 00°00'00" W a distance of 60.29';
thence S 89°22'40" E a distance of 1435.45';
thence S 21°17'26" E a distance of 229.43';
thence S 42°22'14" E a distance of 760.66';
thence S 89°27'16" E a distance of 1465.80';
thence S 00°00'29" W a distance of 759.41';
thence S 74°20'18" W a distance of 454.28';
thence S 64°32'22" W a distance of 175.06';
thence S 83°38'18" W a distance of 661.07';
thence N 78°52'30" W a distance of 559.46';
thence N 60°47'43" W a distance of 71.78';
thence N 85°50'20" W a distance of 400.14';
thence S 74°28'32" W a distance of 158.15';
thence S 02°46'28" W a distance of 117.30';
thence N 84°01'14" W a distance of 328.44';
thence N 75°21'35" W a distance of 380.03';
thence N 76°22'18" W a distance of 336.08';
thence S 81°58'12" W a distance of 110.16';
thence N 80°41'10" W a distance of 1181.68';
which is the point of beginning, having an area of 146.87 acres

The permit area is owned by Dee Blue.

The above described property is to be used for gravel source, roads, stockpiles, and plant facilities.

2. **Pre-Mining, Mine Plan and Reclamation Plan Maps**
These maps are included in Appendix B.

3. **Existing Conditions**
The existing site consists of an active gravel mining operation with approximately 9 years of reserves remaining under the existing permit. Map C-1 shows the current operation as of November 2009. The pre mining land use of the expansion area is irrigated pasture. The expansion area is bordered on the south by a south facing slope that descends to Highway 82, on the west by irrigated pasture owned by Cerise, Clifford Ranch Company, on the north by irrigated pasture and rangeland that has been put into a conservation easement and on the east by a landfill owned by Harold L. Blue. Adjacent landowners to the land where the Blue pit expansion is located are shown in Exhibit G. The Basin and Spring Ditches cross the property and will continue to do so throughout mining and reclamation of the Blue Pit.

There is a concrete plant on site which has a separate special use permit through Garfield County. This concrete plant is owned by Casey Concrete.

4. **Mine Plan**
A. General Mining Plan
The gravel deposit is greater than 100 feet deep in the area of the Blue Pit Expansion. The groundwater level ranges from approximately 60 feet below the surface in the current mining area and increases to 90 feet in the expansion area. Since this operation will not intercept groundwater, the operation will stay at least 2 feet above the groundwater level at all times. Excavation will be conducted with a dozer pushing the raw material to a loader, which will then load the material to the crushing plant. As the mining face moves further from the existing crushing/screening plant location, a haul truck may be used to transport the material from the mining face to the crushing/screening plant. The crushing/screening plant will produce stockpiles of different sized materials. Some of the material will be hauled to the wash plant to make different products for sale as well as feedstock for the concrete plant.

The gravel deposit will be mined at a slope of 1.5H:1V (67% slope). This mining slope will recover the maximum amount of gravel as well as keeping a safe slope. Since the mining depth is 90 feet in some places, benches below the existing ground level will be created during mining to promote safe recovery of the material.

Table 4-502.C(1) describes the mining areas and the quantity of material that is expected to be encounter in those areas. Mining Area 1 is the portion of the existing permit area that is east of the Basin Ditch. Mining Area 2 is the portion of the existing permit which is west of the Basin Ditch. The remaining Mining Areas 3, 4 and 5 make up the expansion area. Mining will progress in order of mining areas. Map C-2 shows these areas. The mining sequence and depth of the deposit has been utilized to lessen the visual impacts to homes to the north. This is explained in greater detail in the Visual Impact Report.

Table 4-502.C(1) Mining Area and Quantities

Mining Area	Acreage	Topsoil (C.Y)	Overburden (C.Y.)	Gravel (Tons)	Years to Complete
Mining Area 1	46.14	7,444	29,776	913,171	2.0
Mining Area 2	18.49	29,831	119,322	3,542,271	7.9
Mining Area 3	18.28	29,492	117,967	3,190,812	7.1
Mining Area 4	22.05	35,574	142,296	4,158,195	9.2
Mining Area 5	18.63	30,056	120,226	3,204,577	7.1
Total	123.59	132,397	529,586	15,009,026	33.4

The material volumes described in Table 4-502.C(1) are approximate but are based on the current operation and exploration drilling conducted in the area. The *Years to Complete* column is based on an average annual production of 450,000 tons per year. This has been the average over the past few years but sales are always dependent on demand.

Additional information on the phasing of the operation and the method of mining are included in the Visual Impact Report because it was the basis of the sequencing. The Visual Impact Report is located in Appendix G.

B. *Mine Facilities and Operation*

The mine facilities and operation will continue into the expansion area as it does now. The shop and stockpile area will remain in its current location near the access entrance until ample room is available on the pit floor. The fuel tank area will stay in its current location over the life of the pit, immediately southeast of the shop building. The wash plant and associated stockpiles is currently located north of the shop building. As mining progresses to the west, this facility will initially move to the area north of the current wash pond location north of the mining area and will eventually be moved to the pit floor. Both the intermediate and final locations are better visually than the existing location for the homes located north of the pit. Equipment parking is located east of the concrete plant and immediately south of the shop. These locations will be maintained for the life of the pit. All current facilities are shown on Map C-1.

The concrete plant is permitted without an expiration date which means that it will stay at its current location after the mining operation has exhausted all its reserves. Water from the Basin Ditch will continue to be used for dust control. As the mining operation moves to the expansion area the processing equipment (crushing and screening plant) may move with the active mining face to reduce pit haul traffic. The processing equipment will be placed in a location close to the northern slope to prevent nuisances to the home owners to the north of the pit.

C. *Topsoil, Overburden and Wash Fines Handling*

An existing topsoil stockpile is located at the eastern edge of the current disturbance area, as shown on Maps C-1 and C-2. This pile contains approximately 104,000 cubic yards. This material will be used to reclaim Mining Area 1 once final grade is achieved. Mining Area 1 requires 86,000 cubic yards of topsoil for reclamation based on the restored thickness of 12 inches. The excess will be used in other areas.

Additional topsoil stockpiles will be located at the temporary wash plant location as shown on Map C-2. This area will be used to temporarily store the topsoil from the expansion area that cannot be directly placed on backfilled areas, Overburden will continue to be stripped in advance of the mining operation. Its thickness varies from 2 feet to 10 feet but it is expected to average 4 feet over the entire expansion area. Since there is a significantly lesser amount of topsoil and overburden compared to gravel, the stripping will only be needed a few days per year. Topsoil will be stockpiled for the initial period until the mining operation has progressed far enough for reclamation to start. This is expected at the end of Mining Area 2. Once areas are ready for reclamation, the stripped topsoil will be directly placed in these areas. Overburden will always be directly placed because there are areas currently ready for overburden placement and this will continue until the end of mining.

Wash fines are generated from the washing operation and will continue to be produced. These fines will be placed on the mining slopes along with the overburden to produce the 3H:1V slopes. The amount of material needed to reclaim the slopes to 3H:1V is shown for each mining area on Map C-2. Currently Mining Area 1 has an excess 829,000 tons of backfill material which can be used for backfilling other areas.

Import material will also be used in the reclamation process for backfilling slopes. This quantity and cost is addressed in the DRMS reclamation bond.

D. *Water Handling*

Water for this site is supplied from the Basin Ditch, Spring Ditch and a well on site. The mining operation has an approved augmentation plan for the use of the water from the Basin Ditch which is located in Appendix J. The water is used for dust suppression, material washing and concrete production. One of the challenges that Western Slope Aggregates faces at this site is mining the reserves under the Basin Ditch. Recovering these resources needs to happen in a way that will not disrupt the functionality of the ditch since this ditch supplies water users downstream. This will be accomplished by mining as close as possible to the ditch from Mining Area 1 and then mining as close as possible from Mining Area 2. In one winter, while the ditch is not running, the material beneath the Basin Ditch will be mined or moved to another area on the pit floor to allow an inverted siphon to be installed. This inverted siphon is a typical use for a ditch to cross a low point without needing a trestle. The water entering the siphon on the south side will push the water out on the north side. This siphon has been used successfully at other sites such as the Colona Pit near Montrose, where the siphon has been in full operation for years without any problems. Very little surface runoff reaches the mining operation because it is protected up gradient by the Basin and Spring Ditches.

E. *Schedule of Operations*

Mining, processing and sales will continue to operate 12 months per year. The hours of operation will be 7:00 a.m. to 8:00 p.m. Monday through Saturday with mining, processing, and sales only occurring until 6:00 p.m.

original permit 7-5 for "extraction operations"

F. *Haul Roads and Access*

The site will continue to use the same haul route to Highway 82, which is a private road and is shown on Map C-2. The daily or hourly haul traffic is not increasing with the expansion of the reserves. The approved access permit with CDOT is included in Appendix C. There is an additional haul route when servicing the area to the north of the pit which only produces a very small amount of tonnage per year. This haul route uses CR 103 and CR 104 to access Crystal Spring Road and is shown on Map C-2. Additional information on the Highway 82 access is provided in Appendix C.

5. Reclamation Plan

A. *General Reclamation Plan*

As stated in the mining plan, the mining slope will be 1.5H:1V to recover the material. These slopes will be backfilled to the final reclamation slope of 3H:1V in mining areas 2, 3, 4, and 5. A justification of reasons why this slope is appropriate at this site is given in Section 7-840 Gravel Extraction Regulations Exhibit K. The reclamation slope in Mining Area 1 is currently 2.5H:1V and will not be changed with this amendment. The material that will be used for this backfilling will be salvaged overburden, washed fines, and import fill. If backfill material is insufficient to reclaim the slopes from 1.5H:1V to 3H:1V then the mining slope will be reduced to compensate for the lesser amount of backfill material. This scenario is not expected since Mining Area 1 has over 800,000 tons of excess fill. The more likely scenario would be that excess fill material will be available and will be placed on the pit floor to decrease the slope lengths and increase the irrigated pasture acreage of the post mine land use.

The total permit area is 146.87 acres. The area to be mined is 123.59 acres. The difference of 23.28 acres will be used for topsoil stockpiling, temporary wash plant location, shop area and access road realignment. The post-mine land use acreage breakdown is shown in Table 4-502.C(2). The concrete plant will remain in its current location after the mining is completed. This will allow for future concrete demands to be met from this site. At that time, the aggregate needed will be imported to the site to produce concrete.

Table 4-502.C(2) Post Mine Land Use

Land Use	Acreage
Rangeland	104.07
Irrigated Pasture	29.21
Roads	5.12
Industrial	8.47
Total	146.87

B. *Topsoil Replacement*

Topsoil has been salvaged from the existing operation and is stockpiled on the eastern portion of the existing permit area (See Map C-2). Topsoil will also be salvaged from the expansion area. Initially, topsoil will be stockpiled to the east of Mining Area 3. As the mining progresses, topsoil can be directly placed in the reclamation areas to remove the stockpile step. Topsoil will be replaced at an approximate thickness of 12

inches over the entire site. Topsoil will only be placed on areas ready for final reclamation. The temporary seed mix that has been designed for this site to reduce visual impacts will grow in overburden.

C. *Haul Roads and Access*

The haul roads that will remain after reclamation are shown on Map F (Reclamation Plan Map). These roads will be used by the landowner for access through the site as well as to the irrigated pasture on the bottom of the site. Additionally, access to the concrete plant operation will remain after final reclamation.

D. *Reclamation Sequencing*

Reclamation of the site will follow the mining operation. This contemporaneous reclamation allows for visual impact mitigation as well as limiting the size of the bond required by the Division of Reclamation, Mining and Safety. See the Cross Section Map located in Appendix G for further details on the reclamation sequencing which includes the temporary and final reclamation activities.

E. *Revegetation Plan*

As areas are mined out they will be revegetated. If the areas are in their final reclamation status, topsoil will be placed and the final seed mix will be applied. If the area has not been backfilled; is not in its final reclamation status; and is visible to the homes north of the site, the temporary seed mix will be applied to mitigate visual impact. The three different seed mixes to be used for reclamation of the Blue Pit are as follows:

Temporary Seed Mix

Common Name	% of mixture	Drill Seed PLS/ acre
Annual Ryegrass	10	5 lbs.
Triticale	10	5 lbs.
Oats	10	5lbs.
Crested Wheatgrass	10	5 lbs
Smooth Brome	10	5 lbs.
Slender Wheatgrass	50	25 lbs.
Totals	100	50 lbs

Irrigated Pasture Seed Mix

Common Name	% of mixture	Drill Seed PLS/ acre
Alfalfa	44	12.0
Orchard Grass	30	8.0
Meadow Brome	26	7.0
Total	100	27.0

Rangeland Seed Mix

Common Name	% of mixture	Drill Seed PLS/ acre
Western Wheatgrass	17	5
Thickspike Wheatgrass	17	5
Slender Wheatgrass	17	5
Green Needlegrass	13	3.75
Indian Ricegrass	9	2.5
Mountain Brome	13	3.75
Four Wing Saltbrush	7	2
Rubber Rabbit Brush	7	2
Total	100	29

The temporary seed mix is used on areas which are not ready to be permanently reclaimed but will cover disturbed areas to lessen visual impacts to the homes to the north and to reduce wind and water erosion.

F. *Post Reclamation Site Drainage*

The Blue Pit is an elevated terrace above the Roaring Fork River Valley. There are no streams that enter the site and there will be no surface water that leaves the site after reclamation. Surface runoff from above the site is captured by the Basin Ditch and the Spring Ditch and will continue to do so after reclamation. All disturbances are graded to the pit floor which is sufficient to hold a 100 year event that drains to the permit area. Additionally, the material of the pit floor is very porous because it consists of large gravelly material. Stormwater that is encountered within the pit will infiltrate to the groundwater as it does today. The reclaimed 3H:1V side slopes will have

stormwater catchment benches which will prevent erosion. The stormwater catchment benches will be graded to one of three grouted channels to take the water from the slope to the pit floor. All post-mining drainage features are shown on Map F (Reclamation Plan Map). See Erosion and Sedimentation Control Plan in Exhibit D for more details on the design of the ditches and grouted channels.

G. *Weed Control*

Initial Weed Treatment Program

The principle existing weed locations are shown on Map C-1. The intent of the Initial Weed Treatment Program is to reduce the noxious weeds for the site to approximately 10% of the current amount. The remaining portion will be treated through annual maintenance treatments. Weeds will be treated using the following program:

The knapweed and other weeds will be treated through spraying. The areas will be sprayed in the fall to maximize potential benefit. The following spring the site will be inventoried again prior to treatment. It is anticipated that the densely infested topsoil stockpile will require 1-2 years of treatment before the knapweed is completely controlled. Once this achieved the weed plan will transition to the maintenance plan.

Weed Maintenance Plan

After the initial intensive weed treatment the site will continue to take inventory and treat weeds onsite. Each mid-April, a noxious weed survey will be made of the permit area. If any noxious weed patches or plants have been identified, they will be sprayed by backpack sprayer or 4-wheeler using chemicals approved for use by the local Weed Management group in Garfield County. This will be done within 2 weeks of the inspection, when the weeds are most vulnerable. Care will be taken to spot spray wherever possible, to avoid killing desirable broadleaf plants.

After reclamation of portions of the site and after final reclamation, weed surveys and spraying will continue until the perennial cover and crop production of the site have met DRMS requirements and bond release has been obtained.

The plan does not contemplate total weed removal on the property, especially the removal of some non-noxious weeds. Past experience shows that some initial weed cover in the first year following retopsoiling is beneficial to the reclamation effort in dry range sites. Weeds tend to provide shade for new grasses, are a means of holding snow on the seedbed longer and protect it from wind and water erosion until the planted species gradually take over the site.

H. *Revegetation Success Criteria*

Revegetation of all dryland reclamation will be deemed adequate when erosion is controlled and the vegetation is considered satisfactory by the DRMS. Garfield County officials can monitor the reclamation at any time and can provide comments to the DRMS regarding any bond releases. Additionally as the mining face progresses, the area that will become visible must have temporary vegetative cover. The reference point for this evaluation is point #7 and is shown on the General

Location Map of the Visual Impact Report which is included in Appendix G. The lower bench of the reclaimed area (29.21 acres) will be restored to irrigated pasture. The success criteria of this area is 90% of the production of alfalfa/grass from the pre-mine fields.

I. *Monitoring Reclamation Success*

Monitoring the reclamation on an ongoing basis will help to ensure successful reclamation. The operator plans to use the local NRCS office to assist in determining the ability of the reclaimed land to control erosion and make any other suggestions which may enhance the reclamation of this site. If minor changes or modifications are needed to the seeding or reclamation plan, revised plans will be submitted to Garfield County. It is hoped that Garfield County will provide assistance in evaluating the success of the ongoing reclamation process. Monitoring of the visual impact mitigation through temporary and permanent revegetation will also be monitored to ensure that the mining operation does not create any unnecessary visual impacts.

6. Geotechnical Stability Analysis

There are no buildings or any structures outside the permit area which could be affected by the excavation. A minimum fifty foot buffer will be maintained from the permit boundary line to all excavations. All reclaimed areas will be restored to relatively flat (<3.5%) slopes except for the side slope, which be mined to a 1.5H:1V and reclaimed to a 3H:1V slope. The surface material of these slopes will be topsoil. During placement of the backfill material, the operator will compact using standard earthmoving techniques.

The soil type of the overburden and waste fines used in the backfilling of the side slopes will range from sand-silt-clay with slightly plastic fines to inorganic silts and clayed silts.

Design factors

In the extremely remote case that a slope failure would occur, if the slope failed up to the overhead power line west of the permit area (the closest man made structure to the operation), Figure 4-502.C(6)A shows the slope angle that would occur. The horizontal distance from the edge of the excavation to the power line is 55 feet. The failure angle would be 20 degrees or 2.7H:1V. This angle is far milder than normal failure angles in material that gets strength from internal angle of friction. Figure 4-502.C(6)B, from Huang, shows typical internal angles of friction for various materials. Assuming that the gravel is classified as GC, clayey gravels, poorly graded gravel – sand - clay, this material has an internal angle of friction of approximately 34 degrees.

The Factor of Safety (FOS) for gravel with a 20 degree slope in GC classified material with an assumed internal angle of friction of 34 degrees can be approximated by ignoring the cohesion component of the stability and simply evaluating the internal angle of friction as follows:

$$FOS = \frac{\text{Tangent of Internal Angle of Friction}}{\text{Tangent of Actual Angle of Failure Surface}}$$

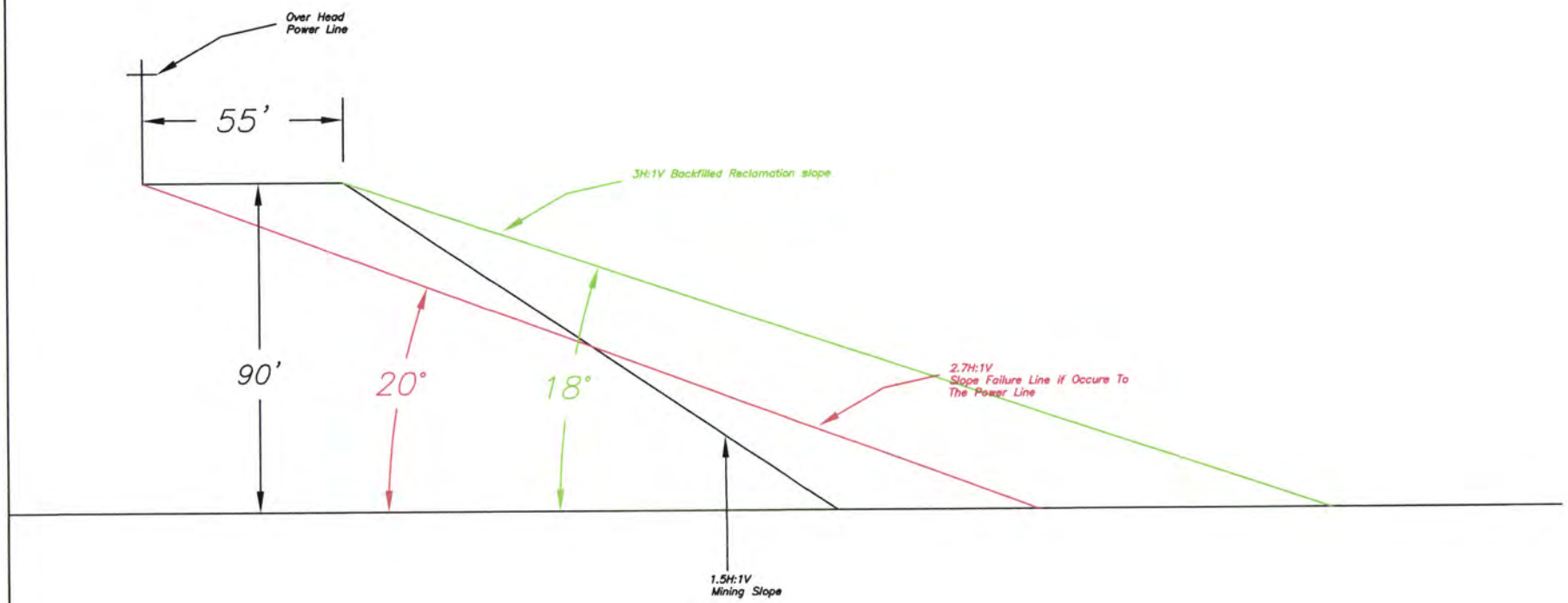
$$FOS = \frac{\text{Tan } 34°}{\text{Tan } 20°} = \frac{.67}{.36} = 2.0$$

This factor of safety far exceeds the normal long term safety factor of 1.3, therefore the plan of extraction, as presented in Figure 4-502.C(6)A, is acceptable. In addition, the exposed 1.5H:1V gravel slopes will only be present for a short period of time, since the mine will be conducting contemporaneous reclamation. These backfilled slopes are at a slope of 3H:1V. The backfilled material will consist of overburden from previously excavated areas or reject fines, which is similar to the overburden.

I, Greg Lewicki, P.E., with over 28 year of experience in mine slope safety analysis in Colorado, certify that the mine plan and reclamation plan presented in this application will lead to stable slopes during and after mining and that there is no realistic threat of failure or to the stability of any structures outside of the permit area.

Greg Lewicki

Greg Lewicki, P.E.
P.E. # 20335
Date 2/10/10



Notes:

Revisions	BY	DATE

DES	RE
DRN	RE
CHK	
APPD	

DATE
1/6/10

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Figure 4-502.C(6)A
Slope Stability
Blue Pit

Figure 4-502.C(6)B (from Huang)

Table 3.1 Average Effective Shear Strength of Compacted Soils.

UNIFIED CLASSIFICATION	SOIL TYPE	PROCTOR COMPACTION: MAXIMUM DRY DENSITY pcf	PROCTOR COMPACTION: OPTIMUM MOISTURE CONTENT %	AS COMPACTED COHESION c_o tsf	SATURATED COHESION c_{sat} tsf	FRICTION ANGLE ϕ deg
GW	well graded clean gravels, gravel-sand mixture	>119	<13.3	*	*	>38
GP	poorly graded clean gravels, gravel sand mixture	>110	<12.4	*	*	>37
GM	silty gravels, poorly graded gravel-sand-silt	>114	<14.5	*	*	>34
GC	clayey gravels, poorly graded gravel-sand-clay	>115	<14.7	*	*	>31
SW	well graded clean sands, gravelly sands	119±5	13.3±2.5	0.41±0.04	*	38±1
SP	poorly graded clean sands, sand-gravel mixture	110±2	12.4±1.0	0.24±0.06	*	37±1
SM	silty sands, poorly graded sand-silt mixture	114±1	14.5±0.4	0.53±0.06	0.21±0.07	34±1
SM-SC	sand-silt-clay with slightly plastic fines	119±1	12.8±0.5	0.21±0.07	0.15±0.06	33±3
SC	clayey sands, poorly graded sand-clay mixture	115±1	14.7±0.4	0.78±0.16	0.12±0.06	31±3
ML	inorganic silts and clayed silts	103±1	19.2±0.7	0.70±0.10	0.09±*	32±2
ML-CL	mixtures of inorganic silts and clays	109±2	16.8±0.7	0.66±0.18	0.23±*	32±2
CL	inorganic clays of low to medium plasticity	108±1	17.3±3	0.91±0.11	0.14±0.02	28±2
OL	organic silts and silty clays of low plasticity	*	*	*	*	*
MH	inorganic clayey silts, elastic silts	82±4	36.3±3.2	0.76±0.31	0.21±0.09	25±3
CH	inorganic clays of high plasticity	94±2	25.5±1.2	1.07±0.35	0.12±0.06	19±5
OH	organic clays and silty clays	*	*	*	*	*

*denotes insufficient data, > is greater than, < is less than
(After Bureau of Reclamation, 1973; 1 pcf=157.1 N/m³, 1 tsf=95.8 kPa)

4-502.C(4) Erosion and Sediment Control Plan — Exhibit D

a. Site Map

The erosion control measures to be installed are shown on Map F (Reclamation Plan Map) which is located in Appendix B.

b. Drainage Structures

There are no drainage features that enter the Blue Pit. Surface water runoff is routed around the site in the Basin and Spring Ditches. A small area north of the expansion area could potentially drain to the pit but a small berm will be installed, as shown on Map F (Reclamation Plan Map) to prevent this inflow. The berm will direct these undisturbed flows to the west. All surface water runoff from the disturbed area drains to the pit floor and will not leave the site.

c. Topography

The existing site topography is shown on Map C-1. The proposed mining topography is shown on Map C-2. The reclamation topography is shown on Map F (Reclamation Plan Map).

d. Grading Plan

The final grading of the site is shown on Map F (Reclamation Plan Map). The final slopes of the site will be 3H:1V for Mining Areas 2 though 5. Mining Area 1 of the existing operation will be reclaimed to 2.5H:1V. Additionally a small berm will be installed on the north side of Mining Area 3 and 5 to assure that no runoff from the irrigated pasture enters the pit.

e. Stockpiles

The stockpile areas will be graded to protect the stockpiles from erosion. The topsoil stockpile will be revegetated with the temporary seed mix to reduce wind and water erosion.

f. Drainage Plan

The proposed drainage plan is shown on Map F (Reclamation Plan Map).

g. Equipment Storage

Equipment and fuel is stored south of Mining Area 2.

h. Temporary Roads

Existing roads are shown on Map C-1. Roads to be used during mining are shown on Map C-2. Final reclamation roads are shown on Map F (Reclamation Plan Map).

i. Areas of Steep Slope

The mining slope is 1.5H:1V (67%). The reclamation slope in Mining Area 1 is 2.5H:L1V (40%) and 3H:1V (33%) in Mining Area 2-5.

j. Construction Schedule

The majority of the erosion and sedimentation control features will be installed on the reclaimed slopes. The reclaimed slopes will be created as areas become available over the next 35-40 years.

The temporary revegetation of the topsoil pile will be within 6 months of the topsoil being placed.

k. Permanent Stabilization

Permanent stabilization of the rangeland slope areas will be achieved through seeding with the rangeland seed mix. Also the stormwater catchment benches will be installed with a concrete lined ditch for the water to get to the pit floor. Permanent stabilization of the irrigation areas will be through seeding with the irrigated pasture seed mix and installation of irrigation system.

l. Erosion Control Measures

Erosion control measures are shown on Map F (Reclamation Plan Map).

m. Estimated Costs

The estimated cost of temporary revegetation is approximately $2,000 per year. This includes seeding and supplemental irrigation. All other costs associated with erosion and sediment control items are for the permanent structures.

n. Calculations

The Stormwater Catchment Benches and Grouted Channel structures were designed to develop this Erosion and Sedimentation Control Plan.

The Stormwater Catchment Benches

The slopes of the reclaimed Blue Pit are very long and need to be protected from erosion. The maximum amount of unbroken slope that will be allowed in the reclamation is 30 vertical feet. The breaks in the slope are going to be the Stormwater Catchment Benches which will collect the water and transport it to the 3 Grouted Channels, which bring the water to the bottom of the site. Figure 4-502.4 shows the ditch and channel designs. The Stormwater Catchment Bench design is shown below.

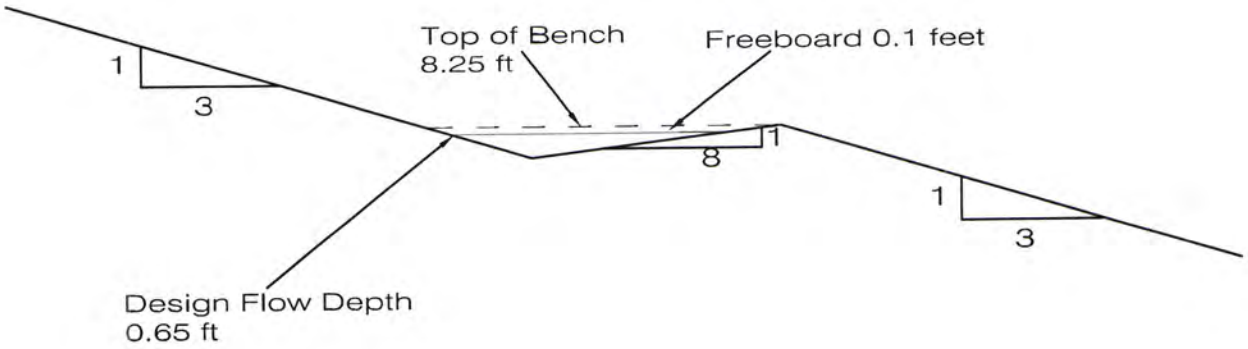
Longest segment of Stormwater Catchment Bench	2,700 feet
Curve Number	79
Drainage Basin Area	6.19 acres
Precipitation Event	24 Hour 100 year
Type II storm	
Rainfall	2.4 in
Runoff	0.40 acre-ft
Watercourse slope	2.0 %
Time of Concentration	19.7 min
Peak Discharge	4.07 cfs
Side Slopes	3H:1V, 8H:1V
Manning Coefficient	0.02
Depth of Flow	0.65 feet
Freeboard Depth	0.10 Feet

The Grouted Channels

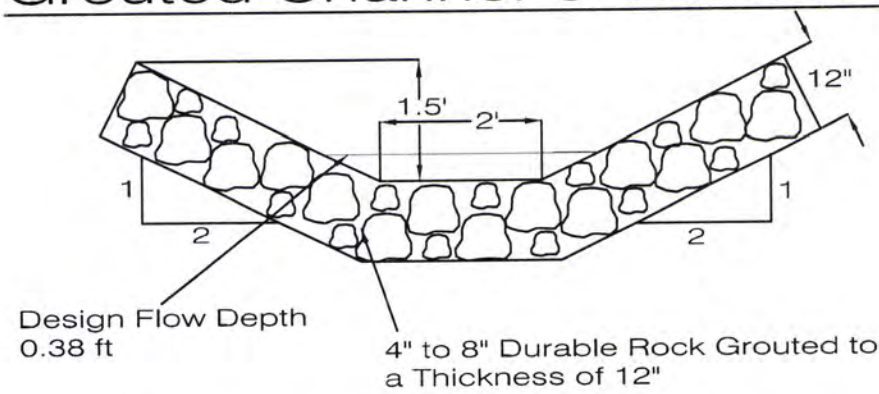
The Stormwater Catchment Benches collect the water from the slopes and transfer it to the Grouted Channel to be taken to the pit floor. There are three grouted channels planned at the Blue Pit. All channels will have the same design and the channel in the northeast portion of Mining Area 1, which receives the most water, will be the basis of the design. This grouted channel receives runoff from multiple catchment benches and the longest one was used to figure the time of concentration.

Longest segment of Stormwater Catchment Bench	2,100 feet
Curve Number	79
Drainage Basin Area	18.9 acres
Precipitation Event	24 Hour 100 year
Type II storm	
Rainfall	2.4 in
Runoff	1.21 acre-ft
Watercourse Slope	33 %
Time of Concentration	15.3 min
Peak Discharge	15.1 cfs
Side Slopes	3H:1V, 8H:1V
Bottom of Channel	2 feet
Manning Coefficient	0.025
Depth of Flow	0.38 feet
Free Board	1.12 feet

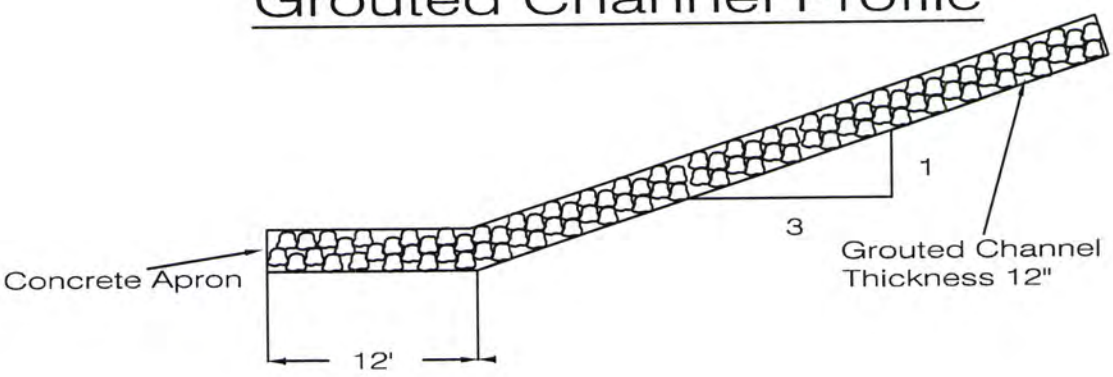
Stormwater Catchment Bench Design Profile



Grouted Channel Cross Section



Grouted Channel Profile



Notes:	Revisions	BY	DATE	DES RE	DATE 1/5/10	Gray Lowell Reid Associates	Figure 4-502.4 Erosion and Sedimentation Control Blue Pit
				DRN RE			
				CHK			
				APPD			

o. Surrounding Land

The surrounding land consists of irrigated pasture, Highway 82, rangeland slopes and an exhausted landfill. The surrounding land is shown on Map C-1.

p. Stormwater Management Concepts

The general plan for controlling stormwater on site is to prevent undisturbed runoff from entering the pit and direct runoff from the pit slopes to the pit floor and allow it to infiltrate to the groundwater.

q. Additional Calculations

All calculations used to determine erosion and sedimentation control structures are included in section n of this exhibit.

r. Maintenance of Best Management Practices

The BMP's for this operation are the contemporaneous reclamation of the slopes, the installation of bench ditches and the installation of grouted channels to bring the water to the bottom of the pit. Western Slope Aggregate is responsible for the maintenance of theses structures. If there is any evidence that the structure will not continue to operate after reclamation, the Division of Reclamation, Mining and Safety will not release the reclamation bond. The schedule of the maintenance of these structures will be as needed and the cost associated with this maintenance is included in part m of this exhibit.

s. Stormwater Management Plan Application

A Discharge Permit is <u>not</u> required for this site through the Colorado Department of Public Health and Environment because there will be no discharge, since the entire operation drains to the pit bottom. The Stormwater Management Plan is a sub part of this permit and is therefore also not required. See the attached letter from Kathryn Dolan of CDPHE for more information.

STATE OF COLORADO

Bill Owens, Governor
Douglas H. Benevento, Acting 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

http://www.cdphe.state.co.us

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

Colorado Department
of Public Health
and Environment

January 8, 2003

Greg Lewicki
Greg Lewicki and Assoc.
11541 Warrington Ct.
Parker, CO 80138

RE: Need for a Stormwater Permit

Dear Mr. Lewicki:

This is in response to your letter of December 13, 2002, regarding the need for a stormwater permit and Stormwater Management Plan (SWMP) for a gravel mining operation.

The stormwater regulations apply to mines only if runoff contacts overburden, raw material, intermediate or finished product, or waste products, and has a reasonable potential of reaching state waters. If all runoff from the mine site an any of the disturbed areas is contained on site, with no discharge off-site expected, a stormwater permit is not required. The Clean Water Act does not establish a threshold (e.g., a 100-year storm event); the potential for any discharge is determined by the site owner/operator. If the owner/operator determines that no permit is needed and so does not apply for one, keep in mind that any change in this situation would require application for a stormwater permit at least 30 days prior to any discharge taking place.

If you have any questions, please give me a call at (303) 692-3596.

Sincerely,

Kathryn Dolan
Stormwater Program Coordinator
Permits Unit
WATER QUALITY CONTROL DIVISION

u. Signature Block

I, _____ SEAN MELLO, am the owner and responsible party for the installation and maintenance of the items disused in this Erosion and Sediment Control Plan and I have reviewed this plan.

This Erosion and Sediment Control Plan was developed under the supervision of

Greg Lewicki P.E.

GREG LEWICKI

4-502.C(5) Landscape Plan

Exhibit E

Western Slope Aggregates

Landscape Plan

Blue Pit Expansion
Carbondale, CO

April 2010

Prepared by:

Greg Lewicki And Associates, PLLC
11541 Warrington Court Phone: (303) 346-5196 Fax (303)-346-6934
Parker, CO USA 80138 E-Mail: info@lewicki.biz

Site Description

The existing Blue Pit is located approximately 2.5 miles east of Carbondale, CO on Highway 82. The Blue Pit is separated from the Roaring Fork River Valley by an 80' tall natural slope which remains after removing the gravel from an elevated alluvial terrace. The groundwater level limits the mining of the deposit at approximately 90 feet deep in the expansion area and 60 feet in current permit area. The groundwater surface is estimated from the existing excavation and by exploration drilling conducted in the area. Groundwater will not be intercepted my mining.

The site has been mined since 1981 under the state Reclamation Permit # M-1981-207. Western Slope Aggregate has operated the site since 1991. The site expanded to an annual production rate of approximately 450,000 tons per year. The existing permit area is 82.70 acres; approximately 25 acres is still able to be mined. This application in 2010 is to allow for an expansion area of approximately 60 acres, all of which will be used for additional gravel mining.

The proposed landscaping features are shown on the Landscaping Plan Map.

Existing Erosion and Sedimentation Control Measures

The landscaping plan is designed to reclaim the mining areas to rangeland and irrigated pasture. The existing area of the mining operation will be reclaimed to irrigated pasture, rangeland and industrial. A breakdown of the post mine land use is shown below.

Post Mine Land Use Table

Land Use	Acreage
Rangeland	104.07
Irrigated Pasture	29.21
Roads	5.12
Industrial	8.47
Total	146.87

The landscaping is designed based on the post mine land use of a particular area. Reclamation tasks will be conducted as areas become available. The general schedule of reclamation activities will be delineated by the exhaustion of reserves in each mining area. The timing is dependent on demand and is expected to take place over the next 35 years.

After Mining Area 1 Is Mined Out

- Backfilling of the northern slope within Mining Area 1

After Mining Area 2 Is Mined Out

- Backfilling of the southern slope within Mining Area 2
- Temporary revegetation of the southern slope of Mining Area 2 for erosion and sediment control as well as visual impact mitigation
- Placing the Basin Ditch within an inverted siphon

After Mining Area 3 Is Mined Out

- Reclaim pit floor in Mining Area 2 to irrigated pasture
- Revegetate the southern slope of Mining Area 2 with the rangeland seed mix
- Reclaim temporary stockpile and wash plant area to rangeland
- Reroute the farm access road (shown on Erosion Control Map 2)

After Mining Area 4 Is Mined Out

- Backfill and revegetate northern slope of Mining Area 3 to rangeland
- Backfilling of the southern slope within Mining Area 4
- Temporary revegetation of the southern slope of Mining Area 4 for erosion and sediment control as well as visual impact mitigation

After Mining Area 5 Is Mined Out

- Backfill and revegetate all remaining slope of Mining Area 4 and 5 to rangeland
- Reclaim all remaining portions of the pit floor in Mining Areas 2-5 to irrigated pasture.

Irrigated Pasture

The irrigated pasture will be landscaped by placing topsoil back on the pit floor and seeding the land with the irrigated pasture mix. The existing side roll irrigation system from the pre mined irrigated pasture will be reused on the post mine irrigated pasture. All equipment will be removed from the irrigated pasture area. See the Landscape Plan Map for the location of the irrigated pasture. No trees or shrubs will be planted in this area. The irrigated seed mix will be drill seeded into the tilled soil with 2,000 lbs of straw per acre. The cost of topsoil placement and seeding is anticipated to be $3,000 per acre and 29.21 acres = $88,000. Western Slope Aggregate operates the current irrigated fields for the landowner and will likely continue this practice until the DRMS bond is released.

Irrigated Pasture Seed Mix

Common Name	% of mixture	Drill Seed PLS/ acre
Alfalfa	44	12.0
Orchard Grass	30	8.0
Meadow Brome	26	7.0
Total	100	27.0

Rangeland

There are flat and sloped areas that will be landscaped to rangeland. These areas are shown on the Landscape Plan Map. The rangeland seed mix will be drill seeded into the tilled soil with 2,000 lbs of straw / acre. The rangeland seed mix has Four Wing Saltbrush and Rubber Rabbit Brush include providing the shrub requirement in the rangeland landscape. These shrubs are anticipated to be of the 5 gallon size prior to the end of mining in a majority of the rangeland areas because the seeding will take place many years ahead of mining completion. Supplemental irrigation may be used during drought years. Tree saplings are excluded from the revegetated areas since they are not needed to mitigate visual impacts and the root system could interfere with the post mine drainage ditches. Additionally, prior to these field being used for irrigated pasture they were a grass/shrub mix with minimal trees.

This irrigation is planned to be accomplished by water truck. Backfilling is a critical part of the rangeland landscaping on the slopes. The mining slope is 1.5H:1V in all areas. The reclamation slope is 3H:1V in all areas except Mining Area 1 which was previously approved at 2H:1V. This material will come from wash fines, overburden and imported fill.

Rangeland Seed Mix

Common Name	% of mixture	Drill Seed PLS/ acre
Western Wheatgrass	17	5
Thickspike Wheatgrass	17	5
Slender Wheatgrass	17	5
Green Needlegrass	13	3.75
Indian Ricegrass	9	2.5
Mountain Brome	13	3.75
Four Wing Saltbrush	7	2
Rubber Rabbit Brush	7	2
Total	100	29

The Rangeland slopes will also receive stormwater runoff protection. This protection consist of Stormwater Catchment Benches and Grouted Channels. The catchment benches will be installed on the slopes when the topsoil is being placed. These benches will run to the grouted channels to remove the stormwater from the slopes. The design for the catchment benches and grouted channels are shown below.

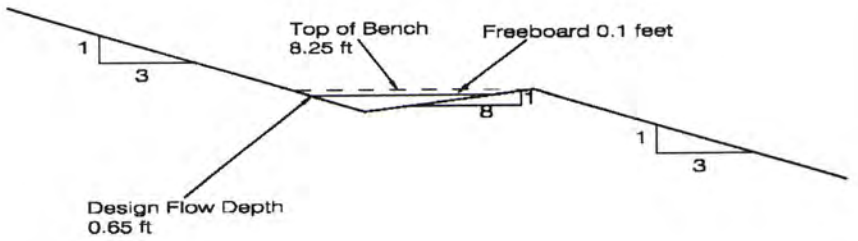
The Stormwater Catchment Benches Design

Longest segment of Stormwater Catchment Bench	2,700 feet
Curve Number	79
Drainage Basin Area	6.19 acres
Precipitation Event	24 Hour 100 year
Type II storm	
Rainfall	2.4 in
Runoff	0.40 acre-ft
Watercourse slope	2.0 %
Time of Concentration	19.7 min
Peak Discharge	4.07 cfs
Side Slopes	3H:1V, 8H:1V
Manning Coefficient	0.02
Depth of Flow	0.65 feet
Freeboard Depth	0.10 Feet

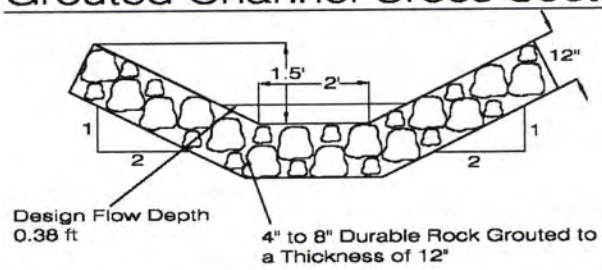
<u>The Grouted Channels Design</u>

Longest segment of Stormwater Catchment Bench	2,100 feet
Curve Number	79
Drainage Basin Area	18.9 acres
Precipitation Event	24 Hour 100 year
Type II storm	
Rainfall	2.4 in
Runoff	1.21 acre-ft
Watercourse Slope	33 %
Time of Concentration	15.3 min
Peak Discharge	15.1 cfs
Side Slopes	3H:1V, 8H:1V
Bottom of Channel	2 feet
Manning Coefficient	0.025
Depth of Flow	0.38 feet
Free Board	1.12 feet

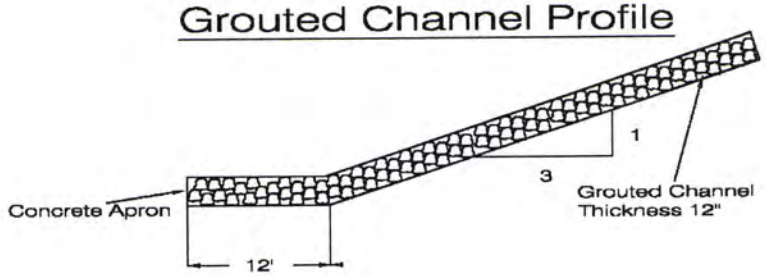
Stormwater Catchment Bench Design Profile



Grouted Channel Cross Section



Grouted Channel Profile



Notes:	Revisions	BY	DATE	DES	RE	DATE 1/5/10	Greg Lewicki And Associates	Figure 4-502.4 Erosion and Sedimentation Control Blue Pit
				DRN	RE			
				CHK				
				APPD				

Industrial
The concrete plant is not operated by Western Slope Aggregate and it has its own special use permit through Garfield County, therefore, it is anticipated that upon mining and reclamation being completed the concrete plant will remain in place. No landscaping is planned in the industrial area since it is currently being used for that purpose. The access road leading to the concrete plant will also remain in place until the concrete plant is removed. There are no cost associated with the landscaping of the concrete plant area.

Farm Access Road
The farm access road that is currently in use will be removed during mining and will be replaced with a bypass road that is located on the west side op the operation. This road will allow the landowner to continue to use the existing access road without having to travel into the pit to access the property. The construction of this road is expected to cost $30,000 since the materials and equipment are already on site. The farm road will be maintained by Western Slope Aggregate until the DRMS bond is released.

Landscaping Installation and Maintenance Cost Estimate

Current DRMS Reclamation Bond
The current Reclamation bond is $307,000. An updated bond calculation will be needed when the Blue Pit amendment application is submitted to DRMS. It is likely that the reclamation bond will increase due to a larger permit area and more elaborate reclamation plan.

Slope Backfill
The anticipated cost of handling the backfill material is $0.85 / C.Y. The entire site needs to handle approximately 3.5 million C.Y. over the next 35 years. This would cost nearly 3 million dollars, but since it done on an ongoing basis and is never needed all at once the DRMS reclamation bond is far less than this total.

Benches and Channels
Installation of all the catchment benches are anticipated to cost $80,000. This cost covers the regarding of the backfill material to create benches at a 2% slope. The three grouted channels have a linear distance of approximately 1,000 feet. The anticipated installation cost of the channels is $20,000 since the aggregate and concrete supply is onsite. The benches and channels will need maintenance in the early years until the vegetation becomes established. This maintenance will be performed by Western Slope Aggregate on an as needed basis. The maintenance will be hand grading to fix any bypasses or breaches. This maintenance is not expected to be needed after the first 5 years of reclamation. Since the site will be reclaimed through out the mine life the expected cost is $2,000 per year for the life of the mine plus 5 years.

Topsoil Replacement
The topsoil replacement and seeding will also be conducted as areas become available but the total cost is estimated at $3,000 per acre and there are 104.07 acres that will be reclaimed to rangeland. That is an anticipated cost of $312,000. This topsoil will be placed after the final

grading of the benches. The topsoil will be replaced on an ongoing schedule and will not cost this full amount at any one time.

Seeding/Irrigation
Areas that are topsoiled will be seeded with the Rangeland or Irrigated Pasture seed mix depending on the post mine land use of that area. Placing the seed will occur as areas are ready and not all at one time during the operation. The anticipated cost of placing the seed and initial supplemental irrigation is $1,200 per acre and there are 104.07 acres that will be reseeded which is a cost of $124,884. The cost of final irrigation of the irrigated pasture is not included because at that point it is associated with the farming operation and the reclamation liability will be released for that portion of the site.

Totals
The total cost of the landscaping of the fully mined out Blue Pit would be $3,632,000. This would never be the reclamation cost at any time. Contemporaneous reclamation minimizes this cost of the worst case reclamation scenario to the total of the DRMS bond which is $307,000.

4-502.D Land Suitability Analysis **Exhibit F**

1. Public Access
   There is no public access to the site currently, historically or planned for the future. The only users of the site are associated with the mining operation and the landowner.

2. Access to Adjoining Roadways
   The site accesses Highway 82 through the use of a private access road which is shown on Map C-1. This access point has an access permit with CDOT which is included in Appendix C. The Highway 82 access point has very good site distances and has existing accel/decel lanes. Additionally the site has a northern access route that is rarely used. This northern route uses CR103 and CR104 to access Crystal Spring Road.

3. Easements
   There is a gas line and overhead power line easement located on the adjacent property. These structures are shown and delineated on Map C-1. The easements are not associated with the subject property.

4. Topography and slope
   The topography and slope of the existing site is shown on Map C-1. The topography and slope of the proposed mining and reclamation plans are shown on Map C-2 and Map F (Reclamation Plan Map) respectively. The reclamation slopes are similar to the native slopes of the area.

5. Natural Features
   There are no significant natural features on or off site.

6. Drainage Features
   The Basin and Spring Ditch divert the existing surface runoff from up gradient of the mining operation around the site. There are no drainages or impoundments that are located within the expansion area.

7. Water
   As seen on Map C-1 the expansion area is irrigated pasture. This has been the use of this land since before the mining operation started. The water supplied to the irrigated pasture comes from the Basin and Spring Ditch. The mining operation also has an approved augmentation plan for this water consumption. Additionally there is a well on site to provide water for the mining operation in the months during which the ditches are not running.

8. Floodplain
   The Blue Pit is not located within or near any floodplains.

9. Soils
   The average topsoil thickness available for salvage is expected to be 12". This topsoil will be stockpiled or directly replaced on reclaimed areas. The soil of the irrigated pasture

area is very porous and requires large amounts of irrigation water to facilitate high production. The soil unit boundaries are shown on Map C-1. The descriptions of these soil units are included in Exhibit G.

10. Hazards
With a mining slope of 1.5H:1V and backfilling to 3H:1V, there are no geological hazards within the mining area. Additional information can be found in the geotechnical study located in Exhibit C. There are no hazards adjacent to the expansion area.

11. Natural Habitat
No trees are to be removed during the expansion of the Blue Pit. The vegetation of the expansion area is primarily irrigated pasture which consists of alfalfa and other pasture grasses. Wildlife does use the expansion area during various times in the year but this operation is not expected to significantly impact wildlife, since the existing operation has not shown to do so. Additional information concerning wildlife is included in appendix H.

12. Resource Areas
This site does not have any known archeological, paleontological or historical importance. If a site of such importance is found during mining, the Colorado Historical Society will be consulted on the correct procedure for handling the site. The Colorado Historical Society file search results are shown in Appendix I.

4-502.E Impact Analysis **Exhibit G**

1. Adjacent Property
   The adjacent landowners to the two parcels of land which the Blue Pit is located on are outlined in Table 4-502.E(1) Adjacent Landowners. The parcel locations are shown on Figure 4-502.E(1) Adjacent Landowner Map. As shown on the Adjacent Landowner Map the majority of the property directly adjacent to the proposed expansion area is owned by the Blue Family. Impacts to the adjacent property owners as well as others in the general area of the expansion area are addressed in the remainder of this exhibit.

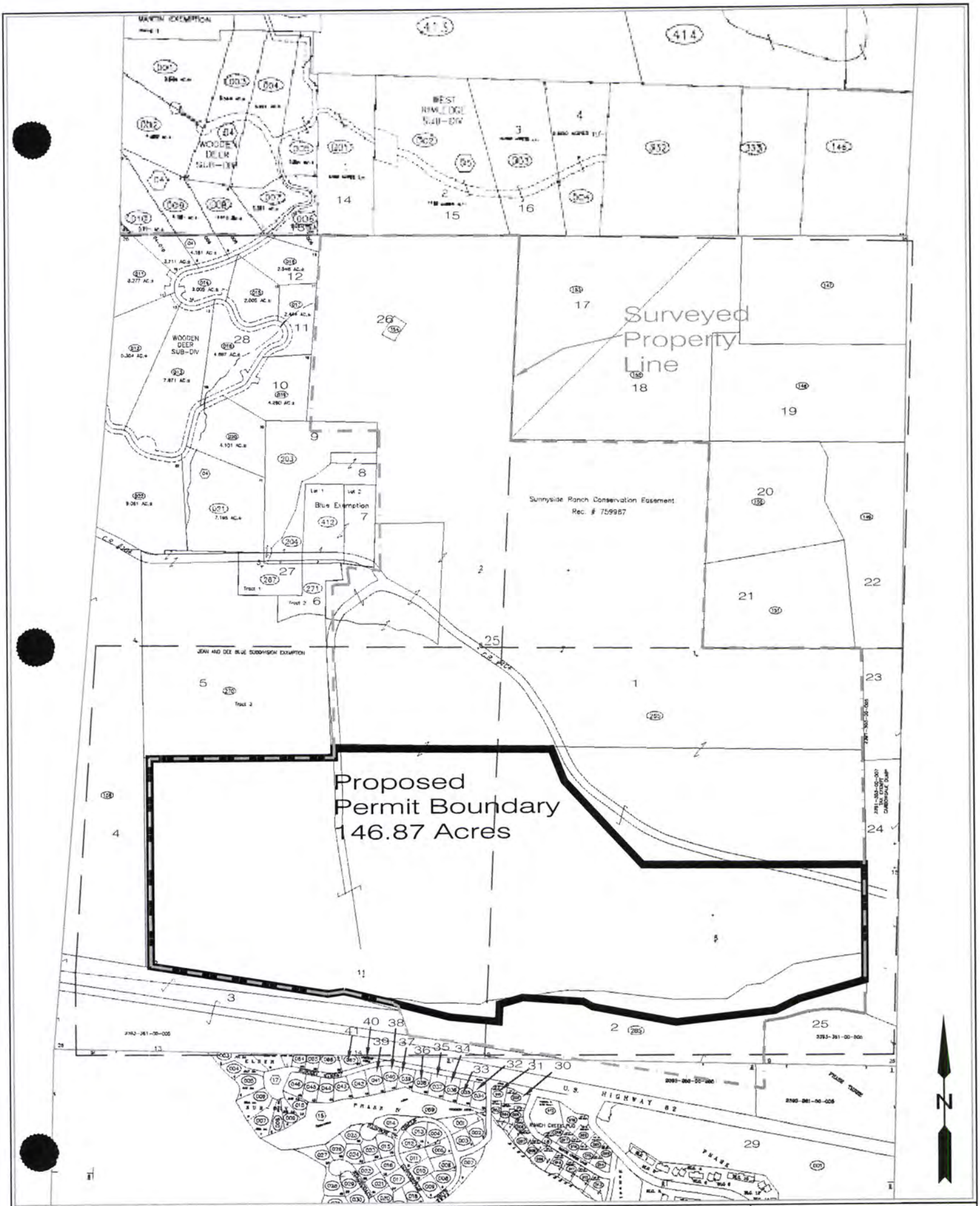
Table 4-502.E(1) Adjacent Landowners

Map Referance	Parcel Number	Landowner	Mailing Adress
1	239325400265	BLUE, JEAN	404 CR 104 Carbondale CO 81623
2	239325400285	BLUE, JEAN M REVOCABLE TRUST APRIL 2002	404 CR 104 Carbondale CO 81623
3	Highway 82 ROW	Colorado Department of Transportation	4201 E Arkansas Ave Denver CO 80222
4	239325300158	CERISE, CLIFFORD RANCH COMPANY	86 CR 104 Carbondale CO 81623-9604
5	239325300270	BLUE, DEE	404 CR 104 Carbondale CO 81623
6	239325200271	BLUE, DEE	404 CR 104 Carbondale CO 81623
7	239325200412	BLUE, DEE	404 CR 104 Carbondale CO 81623
8	239325200204	HARRIS, GLEN	319 CR 104 Carbondale CO 81623
9	239325200203	HARRIS FAMILY TRUST	323 CR 104 Carbondale CO 81623
10	239325204019	JERVIS, DANIEL ROBERT & MARY ANN	276 WOODEN DEER RD Carbondale CO 81623
11	239325204017	MINOR, SCOTT JOSEPH & REBECCA ANN	384 WOODEN DEER RD Carbondale CO 81623
12	239325204016	UPPERSTROM, CHRISTINE B LIVING TRUST	P.O. Box 99 Holly, MI 48442-0099
13	239324304006	KOLLAR, ERNEST P. & BARBARA JOANNE	0746 WOODEN DEER ROAD Carbondale CO 81623
14	239324305001	TRES SOMBREROS, LLC	12705 S. KIRKWOOD ROAD STE 214 Stafford TX 77477
15	239324305002	HAMMES, MICHAEL N. & LENORE L.	5363 COUNTY ROAD 100 Carbondale CO 81623
16	239324405003	KREAGER, RANDALL & NANCY	15815 W PORTAGE RIVER SOUTH RD Elmore OH 43416
17	239325100153	PETERS, GREGORY N. & BRENDA	5351 COUNTY ROAD 100 Carbondale CO 81623-8812
18	239325100152	WALTER, WILLIAM C & SUSAN C	372 GLEN EAGLE RD Aspen CO 81611
19	239325100148	MILLER, PHILIP L. & SALLY A.	5347 COUNTY ROAD 100 Carbondale CO 81623-8812
20	239325100150	MATTIS, LOUIS P	5345 COUNTY ROAD 100 Carbondale CO 81623-8812

Table 4-502.E(1) Adjacent Landowners Continued

Map Referance Number	Parcel Number	Landowner	Mailing Adress
20	239325100150	MATTIS, LOUIS P	5345 COUNTY ROAD 100 Carbondale CO 81623-8812
21	239325100151	WELLES, SONDRA T & PETER S	3013 CAVES ROAD Owings MD 21117
22	239325100149	HORN, JAMES A	5344 COUNTY ROAD 100 Carbondale CO 81623
23	239130300006	BLUE, HAROLD L.	4003 COUNTY ROAD 100 Carbondale CO 81623-8810
24	239130300007	BLUE, HAROLD L.	4003 COUNTY ROAD 100 Carbondale CO 81623-8810
25	239336100005	RANCH AT ROARING FORK HOMEOWNERS ASSN.	014913 Highway 82 Carbondale CO 81623
26	239325200145	HARRIS FAMILY TRUST	323 CR 104 Carbondale CO 81623
27	239325200267	BLUE, DEE	404 COUNTY ROAD 104 Carbonedale, CO 81623
28	239325204018	HABERMAN, RICHARD	401 E LUPINE DR ASPEN, CO 81611-2346
29	239336100001	RANCH AT ROARING FORK HOMEOWNERS	14913 HIGHWAY 82 CARBONEDALE, CO 81623
30	239336118002	HENKE PROPERTY LLC	215 S MONARCH STE 101 ASPEN, CO 81611
31	239336118001	SPEAKER, RONALD V & LISA B	421 PONDEROSA PINES WAY CARBONDALE, CO
32	239336215034	N/A	N/A
33	239336215035	N/A	N/A
34	239336215036	CLARK, DAVID C	108 SURREY ST CARBONDALE, CO 81623
35	239336215037	DEBEQUE FAMILY TRUST, DATED 1-22-92,	412 N STALLION CT QUENN VALLEY, AZ 85218
36	239336215038	KNECHT, ANNE R.	146 SURREY ST CARBONDALE, CO 81623
37	239336215039	DEWOLFE, SARAH H.	166 SURREY ST CARBONDALE, CO 81623
38	239336215040	BRUCE, KEVIN MICHAEL	188 SURREY STREET CARBONDALE, CO 81623
39	239336215041	LILJEDAHL, DOUG	210 SURREY STREET CARBONDALE, CO 81623
40	239336215068	KASSCO REALTY CORP.	N/A
41	239336215067	WHITSON, LUETTA	227 SURREY STREET CARBONDALE, CO 81623

Figure 4-502.E(1) Adjacent Landowner Map



Notes: See Table 4-502.E(1) for parcel numbers, landowner names, and mailing adresses. Parcel lines are approximate.

Revisions	BY	DATE
Additional Landowners	RE	4/5/10

DES	RE
DRN	RE
CHK	
APPD	

DATE 12/22/09

SCALE 1" = 700'

Greg Lowicki And Associates

Western slope Aggregate
Figure 4-502.E(1)
Adjacent Landowner Map
Blue Pit

2. Adjacent Land Use
   The adjacent land use within a 1500' radius of the expansion area is irrigated pasture, residential, rangeland (wildlife habitat), Highway 82, other county roads, gravel mining, commercial landscaping yards, tree farm leased by the owner of the pit, and an old county landfill.

3. Site Features
   The Spring Ditch and the Basin Ditch are within the Blue Pit Expansion Area. The Basin Ditch has an average flow of approximately 40 C.F.S. while the Spring Ditch is approximately 1 C.F.S. These ditches will be kept operational throughout the mine life. Surface water from up gradient of the expansion area is primarily collected by these ditches and will not significantly be encountered within the mining operation. The ground water has been shown to range from 60'-90' below the natural surface at the site and mining will not intercept groundwater. Table 4-502.E(3) shows the climate data for Glenwood Springs which receives similar amounts of precipitation and is at a similar elevation to the site. Additional information about the site features can be seen on Map C-1 and is described in Exhibit C.

GLENWOOD SPRINGS # 2, COLORADO (053359)
Period of Record Monthly Climate Summary - Period of Record: 9/ 1/1893 to 6/30/2009
Table 4-502.E(3) – Climate Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	36.9	42.6	51.5	61.6	72.1	82.3	88.6	86.1	78.3	66.3	50.0	38.1	62.8
Average Min. Temperature (F)	11.7	16.7	24.5	31.2	38.4	44.2	50.8	49.7	41.9	32.0	22.4	13.6	31.4
Average Total Precipitation (in.)	1.47	1.25	1.42	1.60	1.42	1.10	1.24	1.49	1.60	1.46	1.15	1.29	16.48
Average Total SnowFall (in.)	18.0	11.2	6.7	1.9	0.3	0.0	0.0	0.0	0.0	1.1	5.3	15.1	59.6
Average Snow Depth (in.)	5	3	0	0	0	0	0	0	0	0	0	3	1

4. Soil Characteristics
   The average topsoil thickness available for salvage is expected to be 12 inches. This topsoil will be stockpiled or directly replaced on reclaimed areas. The soil of the irrigated pasture area is very porous and requires large amounts of irrigation water to facilitate high production. The soil unit boundaries are shown on Map C-1. The descriptions of these soil units are included on the following tables from United States Department of Agriculture.

Report—Engineering Properties

Absence of an entry indicates that the data were not estimated. The asterisk "*" denotes the representative texture; other possible textures follow the dash.

Engineering Properties– Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield, and Pitkin Counties

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
6—Almy loam, 1 to 12 percent slopes												
Almy	0-8	*Loam	CL-ML, CL	A-4	0	0	95-100	90-100	75-95	50-75	25-30	5-10
	8-26	*Fine sandy loam	SC, SC-SM	A-4	0	0	95-100	90-100	55-80	35-50	25-30	5-10
	26-60	*Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	75-85	35-55	25-35	5-15

Engineering Properties– Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield, and Pitkin Counties

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
13—Atencio-Azeltine complex, 3 to 6 percent slopes												
Atencio	0-10	*Sandy loam	SC, SC-SM	A-2, A-4	0	0	100	100	60-70	30-40	25-30	5-10
	10-20	*Sandy clay loam	CL-ML, SC, SC-SM, CL	A-4	0	0	100	100	80-90	35-55	25-30	5-10
	20-30	*Gravelly sandy loam	GM, SM	A-1, A-2	0-10	0-15	60-80	55-75	35-50	20-30	25-30	NP-5
	30-60	*Very gravelly sand	GP-GM, SP, SP-SM, GP	A-1	0-25	0-25	35-55	30-50	20-35	0-10	—	NP
Azeltine	0-9	*Gravelly sandy loam	SC, SC-SM, GC, GC-GM	A-2, A-1	0-10	0-15	60-80	55-75	35-50	20-30	25-30	5-10
	9-16	*Gravelly loam, Gravelly sandy loam	GC, GC-GM, SC, SC-SM	A-4, A-1, A-2	0-10	0-15	60-80	55-75	35-70	20-55	25-30	5-10
	16-60	*Extremely gravelly sand	GP, GP-GM	A-1	0-30	0-35	15-30	10-25	5-15	0-5	—	NP
34—Empedrado loam, 2 to 6 percent slopes												
Empedrado	0-5	*Loam	CL, CL-ML	A-4	0	0	95-100	90-100	80-95	55-75	25-30	5-10
	5-14	*Clay loam	CL	A-6	0	0	95-100	90-100	80-95	70-80	30-35	10-15
	14-40	*Clay loam	CL	A-6	0	0	95-100	90-100	80-95	70-80	30-35	10-15
	40-60	*Clay loam	CL	A-6	0	0	95-100	90-100	80-95	70-80	30-35	10-15

Engineering Properties– Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield, and Pitkin Counties												
Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
42—Fluvaquents, 0 to 10 percent slopes												
Fluvaquents	0-10	*Variable	ML, SC, SM, CL	A-2, A-4, A-6	0	0-10	90-95	85-95	55-65	20-60	15-30	NP-15
	10-24	*Stratified gravelly sand to clay	SM, CL, CL-ML, ML	A-2, A-4, A-6	0	0-20	65-85	60-80	45-70	30-60	20-35	NP-15
	24-60	*Very gravelly sand *Gravelly sand	SP-SM, GP, GP-GM, SP	A-1	0	10-30	40-80	30-70	10-25	0-10	—	NP
55—Gypsum land-Gypsiorthids complex, 12 to 65 percent slopes												
Gypsum land	0-60	*Gypsiferous material	—	—	—	—	—	—	—	—	0-14	—
Gypsiorthids	0-8	*Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0-5	100	90-100	60-90	40-55	20-25	NP-5
	8-23	*Fine sandy loam, Loam	SM, CL-ML, ML, SC-SM	A-4	0	0-5	100	90-100	50-90	35-60	20-25	NP-5
	23-39	*Fine sandy loam, Loam	SM, CL-ML, ML, SC-SM	A-4	0	0-5	100	90-100	50-80	35-60	20-25	NP-5
	39-43	*Weathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties– Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield, and Pitkin Counties												
Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
92—Redrob loam, 1 to 6 percent slopes												
Redrob	0-14	*Loam	CL, CL-ML	A-4	0	0	95-100	95-100	85-95	60-75	25-30	5-10
	14-20	*Stratified loamy sand to stony loam	CL-ML, SC, SC-SM, CL	A-4	0-25	0-15	95-100	90-95	65-85	35-60	20-25	5-10
	20-60	*Extremely cobbly loamy sand, Very gravelly sand, very cobbly sand	SM, SP-SM, GM, GP-GM	A-1	0-10	20-50	40-65	30-60	20-35	5-15	—	NP
Fluvaquents	—	—	—	—	—	—	—	—	—	—	—	—

Engineering Properties– Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield, and Pitkin Counties												
Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
106—Tridell-Brownsto stony sandy loams, 12 to 50 percent slopes, extremely stony												
Tridell	0-2	*Stony sandy loam	SM, SC-SM	A-2	10-45	0-30	75-90	70-85	45-60	25-35	20-25	NP-5
	2-14	*Very cobbly fine sandy loam	SM, GC-GM, GM, SC-SM	A-4, A-1, A-2	0-15	50-70	45-90	40-85	30-70	20-45	20-25	NP-5
	14-25	*Cobbly sandy loam	SC-SM, SC	A-2	0-10	25-45	75-90	70-85	45-60	25-35	25-30	5-10
	25-37	*Very stony fine sandy loam	SC-SM, SM, GC-GM, GM	A-1, A-2, A-4	25-70	20-50	45-90	40-85	30-70	20-45	20-25	NP-5

Engineering Properties– Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield, and Pitkin Counties												
Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
	37-60	*Very stony loamy sand	SM, SP-SM, SW-SM	A-1, A-2	25-70	20-50	75-90	70-85	35-65	10-25	20-25	NP-5
Brownsto	0-11	*Stony sandy loam	SC, SC-SM	A-2	10-45	0-30	75-90	70-85	45-60	25-35	25-30	5-10
	11-30	*Very gravelly sandy loam	GC-GM, GP-GC, GW-GC	A-1, A-2	0	0-5	35-55	30-50	20-35	10-20	25-30	5-10
	30-42	*Very gravelly loamy sand	GM, GP-GM, GW-GM	A-1	0	0-5	35-55	30-50	20-40	10-15	20-25	NP-3
	42-60	*Gravelly sandy loam	SC, SC-SM, GC, GC-GM	A-1, A-2	0	0-10	60-80	55-75	35-50	20-30	25-30	5-10
115—Yamo loam, 6 to 12 percent slopes												
Yamo	0-8	*Loam	CL, CL-ML	A-4	0	0	85-100	80-100	70-95	50-75	25-30	5-10
	8-14	*Loam, Clay loam	CL-ML, CL	A-4	0	0	85-100	80-100	70-90	50-75	25-30	5-10
	14-60	*Loam, Clay loam	CL, CL-ML	A-4	0	0-5	85-100	80-100	70-90	50-75	25-30	5-10

5. Geology and Hazard
   The geology of the site is an alluvial gravel deposit which is 50-90 feet taller than the river valley floor. The gravel deposit is much deeper than 90 feet below the natural ground level but ground water is encountered prior to reaching the full depth of the deposit. The hill side up gradient of the site consists of fine grained gypsum material. This hill side has an average slope of approximately 5H:1V(20%) and is not at risk of a slope failure due to the mining operation.

6. Water Supply
   Water is supplied to this operation from the Basin Ditch. This consumption is covered through an approved augmentation plan. Additionally water is supplied from the well on site which is shown on Map C-1. Potable water is purchased from a supplier and is delivered to the site by truck.

7. Groundwater and aquifer recharge
   Groundwater and aquifer recharge is not expected to be altered by this operation. The mining operation will not intercept groundwater. Also, irrigation of the permit area will continue ahead of the mine sequence as well as after reclamation to continue to recharge the aquifer.

8. Environmental effects
   a. Flora and Fauna
      No trees are to be removed during the expansion of the Blue Pit. The vegetation of the expansion area is primarily irrigated pasture which consists of alfalfa and other pasture grasses. Wildlife does use the expansion area during various times in the year but this operation is not expected to significantly impact wildlife, since the existing operation has not shown to do so. Additional information for impacts to wildlife is included in appendix H.

   b. Archaeological
      This site does not have any known archeological, paleontological or historical importance. If a site of such importance is found during mining, the Colorado Historical Society will be consulted on the correct procedure for handling the site. No impact to any archeological, paleontological or historical importance site is expected. The Colorado Historical Society file search results are included in Appendix I.

   c. Radiation
      This site is not expected to have any impact of the radiation levels in the area.

   d. SPCC
      A Spill Prevention Control Countermeasure Plan has been produced for this site since it stores greater than 1320 gallons of petroleum products on site. The SPCC plan is included in Appendix A.

9. Traffic

The haul traffic from the current operation exits the site from a private road and intersects Highway 82 as shown on Map C-1. The haul traffic for the expanded operation will access the site in the same fashion as it does currently. The existing access to Highway 82 has an access permit from CDOT and the permit is included in Appendix C. Even though the Blue Pit is expanding, the annual production is going to stay the same which means the truck traffic will stay the same. A traffic study will be conducted if required by CDOT to keep the existing access permit, but it is our understanding that a traffic study is not needed. There is a small amount of truck traffic that accesses the area north of the Blue Pit through CR 103 and CR 104. This access route is only used for product sales north of the pit on Crystal Spring Road and is a very small amount of the annual production.

10. Nuisance

Western Slope Aggregate knows that there are impacts the surrounding community from this gravel mining operation. The mining and reclamation plan has been designed to mitigate these impacts to the fullest extent possible. Glare, vapor, smoke and vibration are not expected to be a nuisance at this operation due to the type of mining operation and the products made on site.

Dust - The processing equipment, along with the mining operation, has air emission permits in place and will not be changed as part of this expansion. These air permits need to be revised every 5 years and will be kept up do date with items relative to dust emissions.

Noise – Western Slope Aggregate has operated the site since 1991 and has not had a noise violation. WSA will continue to operate the site below the state noise limits. A full noise study was conducted and the report is included in Appendix E

Visual Impact – Visual impacts have been mitigated through the use of the natural topography, project phasing and mining the deposit from the bottom where possible. The visual impacts were studied using 3D models of the mining and reclamation plan and site photos. The Visual Impact Report shows the different views of the site and addresses visual impact. This report is included in Appendix G.

11. Reclamation Plan

The Reclamation Plan has been produced to satisfy the requirements of Garfield County with one variation. The proposed reclamation plan calls for the final slopes to be at 3H:1V or shallower, while the regulation 7-840.H(1.b) requires 5H:1V slopes on all dryland areas. A variance is believed to be suitable in this case as the slopes are hidden from view from the general public, excluding the homes north of the site. 3H:1V slopes will maximize the resource recovery, as well as the land available the irrigate after mining. The full reclamation plan is included in Exhibit C.

Improvement Agreement **Exhibit H**

Section 7 Division 1 General Approval Standards for Land Use Change Permits

Exhibit I

1. **Compliance with Zone District Use Restrictions**

   The Blue Pit Expansion Complies with zoning regulations.

2. **Compliance with Comprehensive Plan and Intergovernmental Agreements**

   The Blue Pit Expansion is consistent with the Garfield County Comprehensive Plan.

3. **Compatibility**

   The expansion of the Blue Pit is not changing the intensity or scale of the project. This expansion only extends the number of years that it will be operating. Impacts to surrounding property are addressed in Exhibit D.

4. **Sufficient Legal and Physical Source of Water**

   A. Determination of Reliability of Water Supply

   1) Peak Usage

   The peak usage is not going to change at this site since production is not changing. The approved Augmentation plan allows for 7.4 acre-feet of water to be pulled from the Basin Ditch each year.

   2) Adequacy of Water Source

   The anticipated water use is 7.4 acre-feet per year.

   3) Quality of Water Source

   Potable water for the site is bottled water.

   4) Irrigation Water

   The irrigation water comes from the Basin and Spring Ditches. The water right is included In Appendix J.

   5) Fire Protection Requirements

   Currently there is no water supply for fire protection. Upon request by the local fire protection district, a cistern tank may be installed.

B. Individual Wells

There is only one well on site and it is used for industrial use, primarily to supply the concrete plant. No new wells are planned.

5. Adequate Water Supply

A. Authority

B. Water Supply Requirements

1) Water supply requirements are not changing as part of this application. The estimated supply requirements are 7.4 acre-feet per year. The breakdown is as follows:

Pond Evaporation	1.35 Acre-feet
Dust Control	1.54 Acre-feet
Crusher / Screen	2.09 Acre-feet
Concrete Truck Washout	2.38 Acre-feet

2) The source of the water to be used by the Blue Pit Expansion is the Basin and Spring Ditch. Also there are 2 wells on site which supplies water to the concrete plant and the shop. These items are shown on Map C-1.

3) The water supplied from the Basin and Spring Ditch as well as the well on site are not used for drinking water. Potable water is provided by bottled water.

4) The Basin and Spring Ditch only run during irrigation season. The well on site is not affected by seasonal variations. During non irrigation season, all water for the operation comes from the well. A majority of the water demands are during irrigation season.

5) Water used in the material washing operations will be recycled through the plant to reduce the annual amount of water used. Water recycling is currently conducted at the Blue Pit.

6) A majority of the water consumption occurs during irrigation season. Washed material is stockpiled through the winter to reduce winter water needs.

7) The approved augmentation plan is included in Appendix J.

C. Water Supplied by Water Supply Entity Requirements

1) Water is supplied from an onsite source therefore this section does not apply to the Blue Pit Expansion.

D. Determination of Adequate Water Supply

1) The approved augmentation plan as well as the consumption estimate should allow the Board of County Commissioners to determine adequate water supply.

6. Adequate Central Water Distribution and Wastewater Systems

A. The locations of the water use change as mining progresses which makes a central distribution system impractical.

B. Wastewater System Standards

1. Wastewater requirements for the Blue Pit are handled by portable toilets.

7. Adequate Public Utilities

This site has adequate public utility service.

8. Access and Roadways

A. (this item was blank in the County Regulations)
B. This parcel has access to Highway 82.

C. The access road connecting the site to Highway 82 is safe and is not going to be changed in the expansion of the Blue Pit.

D. No additional traffic will be produced by the expansion of the Blue Pit. The existing access safely and efficiently handles the traffic from the site.

9. No Significant Risk of Natural Hazard

The Blue Pit Expansion is not subject to significant risk from natural hazards and will not exacerbate existing natural hazards.

Section 7 Division 2 General Resource Protection Standards For Land Use Change Permits **Exhibit J**

1. Protection of Agricultural Lands

A. No Adverse Affect to Agricultural Operation.

The operation of the Blue Pit Expansion area will allow the majority of the parcel to remain as agricultural use. The mining operation is expected to take 35-40 years and the portions to be mined later will have irrigated pasture as long as possible. Additionally the land will go back to agricultural use after reclamation.

B. Domestic Animal Control

Domestic animals will not be allowed to interfere with livestock.

C. Fences

All fences between the property of the Blue Pit and adjoining property will be maintained.

D) Roads

All new roads are set back a sufficient distance from property boundaries to allow for maintenance without damaging fences. Dust will be controlled on these roads.

E) Irrigation Ditches

1. Maintenance
   The use and maintenance ability of the Basin and Spring ditch will remain through mining and after reclamation.

2. Right-of-ways
   The Blue Pit Expansion will not interfere with the Basin or Spring Ditch rights-of-way.

3. Maintenance Easements
   A maintenance easement of twenty-five (25) feet from the edges of the Basin and Spring Ditch banks shall be preserved and indicated on Map F (Reclamation Plan Map).

2. Protection of Wildlife Habitat Areas

A. Buffers
A Wildlife and Habitat Assessment has been prepared and is included in Appendix H. The mining operation will be primarily on the pit floor which provides a screen to the wildlife habitat areas.

B. *Locational Controls of Land Disturbance*
The Blue Pit Expansion will have very little further impact on the wildlife of the area than does the current operation. Migratory routes will not be blocked by the disturbance.

C. *Preservation of Native Vegetation*
The vegetation that will be disturbed by the expansion area is primarily irrigated pasture grass/alfalfa. This is not the native vegetation. Trees and shrubs of the rangeland areas will not be removed. The rangeland seed mix described in the reclamation plan is designed to mimic the native rangeland vegetation. A weed management plan is included in the Reclamation Plan to prevent weed infestations after soil disturbance.

D. *Habitat Compensation*
Critical wildlife habitat is not being disturbed.

E. *Domestic Animal Control*
Domestic animals will be controlled at the Blue Pit.

3. Protection of Wetlands and Waterbodies

There are no wetlands or waterbodies within the Blue Pit Permit Area.

4. Protection of Water Quality From Pollutants

A. *Compliance with State and Federal Regulations*
Storage of hazardous materials will be in conformance with state and federal regulations. A SPCC Plan is included in Appendix A.

B. *Storage Near Waterbodies Restricted*
Storage of hazardous materials will be in conformance with state and federal regulations. A SPCC Plan is included in Appendix A.

C. *Spill Prevention*
Spill Prevention is addressed in the SPCC plan which is located in Appendix A.

D. *Machine Maintenance*
There are no waterbodies at the Blue Pit.

E. *Fuel Storage Areas*
Fuel Storage is addressed in the SPCC Plan located in Appendix A.

F. *Waste Storage*
There is no runoff from the Blue Pit but any waste will be stored in a contained area.

5. Erosion and Sedimentation

Erosion and sedimentation is discussed in detail in the Erosion and Sedimentation Control Plan which is located in Exhibit D.

6. Drainage

Drainage is discussed in detail in the Erosion and Sedimentation Control Plan which is located in Exhibit D.

7. Stormwater Runoff

Stormwater runoff is discussed in detail in the Erosion and Sedimentation Control Plan which is located in Exhibit D.

8. Air Quality

The Blue Pit has approved air emission permits for the site and processing equipment through CDPHE. These permits are located in Appendix F.

9. Areas Subject to Wildfire Hazard

A. Location Restrictions
The Blue Pit is not located in an area designated as a severe wildfire hazard.

B. Development Does Not Increase Potential Hazard
The Blue Pit does not increase wildfire hazard.

C. Fuel Modifications
The vegetation in the Blue Pit Expansion area is irrigated pasture grass/alfalfa and does apply to this regulation.

D. Roof Materials and Design
No roofing materials will be installed in the Blue Pit Expansion area.

E. Safety Areas in Residential Development
The Blue Pit Expansion is not a residential development.

F. Cul-de-sac
There are no Cul-de-sacs to be built at the Blue Pit.

G. Hammerhead
There are no hammerhead turnarounds to be built at the Blue Pit.

H. Road Grade
The Blue Pit is not located within a wildfire hazard area.

10. Areas Subject to Natural Hazard and Geologic Hazard

The Blue Pit is not located in a Natural or Geologic Hazard area.

11. Areas of Archaeological, Paleontologist or Historical Importance

The Blue Pit Expansion area does not correspond to any known site recognized by the Colorado Historical Society. The Colorado Historical Society file search results are shown in Appendix I.

12. Reclamation

A. Applicability
The reclamation standards apply to the Blue Pit Expansion.

B. *Reclamation of Disturbed Areas*
Reclamation of Disturbed Areas is addressed in the Reclamation plan which is located in Exhibit C.

Section 7-840 Gravel Extraction Regulations **Exhibit K**

A. Water Quality & Quality Impacts / Floodplain Impacts

1. The Blue Pit is not located near a floodplain of a river.

2. Stormwater management is addressed in the Erosion and Sedimentation Plan. Surface water will not leave the site and groundwater will be protected through the Spill Prevention Counter Measures and Control Plan which is included in Appendix A. This site does not need a discharge permit through CDPHE and therefore does not need a Stormwater Management Plan through CDPHE.

3. The SPCC Plan is included in Appendix A.

4. A letter from the fire protection district is included at the end of this Exhibit.

5. No materials or wastes shall be deposited upon the property in such a form or manner that they could be transferred off the property by any reasonable foreseeable natural cause or force.

6. This site is not within the 100 year floodplain of any river.

7. This site is not located within an area of shallow flooding.

8. This site is not located within 100 year floodplain of any river.

9. This is not an in-stream mining operation.

10. Dewatering will not be conducted at this site.

11. The approved augmentation plan for use of water from the Basin Ditch is included in Appendix J. Also there is a well on site that provides water to the concrete operation year round. Nothing is planned to change with respect to the water use at this site.

B. Air Quality

1. The existing operation has air permits for the site as well as processing equipment. When renewals for these permits are required (normally every 5 years) they will be submitted. This operation will continue to operate within County State and Federal regulations and will not create a nuisance or hazard. The Air Permits are located in Appendix F.

2. Maintenance activities producing odors past the property boundary will be conducted within a building or outdoors during the hours of 7:00AM to 7:00 PM Monday – Saturday.

3. This operation is located sufficient distance from other mining operations and will not create cumulative impacts to air quality.

4. The current air permits for the site and processing equipment are located in Appendix F.

C. Noise and Vibration

1. A noise Study has been conducted by Engineering Dynamics Incorporated and is included in Appendix E.

3. The operation will not impact the adjacent property through vibration.

D. Visual Impacts

1. The mining phases are shown on Map C-2.

2. Equipment storage is addressed in the Visual Impact Report which is included in Appendix G.

3. If required, additional shielding will be installed.

4. This site is not located in an entryway or growth center.

5. Berming, screening and buffering are addressed in the Visual Impact Report.

6. All Lighting will be directed inward and downwards towards the property.

7. The Blue Pit is one continuous pit, but reclamation activities will follow the mining operation to the extent possible. Further details of the reclamation sequencing can be found in the Visual Impact Report or in the Reclamation Plan included in Exhibit C.

E. Impacts to County Road System

1. The existing operation access directly to the state Highway 82. There is an approved access permit through CDOT and it is not expected to need revision. The traffic from the site will stay the same as it is today under the existing permit.

2. There is an alternate access route to the north of the site but does not see a significant number of trucks since it is only used when hauling to the homes north of the Blue Pit.

3. The access to the site is directly to the State Highway and therefore Western Slope Aggregate does not need to submit evidence of insurance.

4. There are no road upgrades needed since the traffic volume is not increasing.

5. All access used for the expansion area are existing with existing access permits.

6. Western Slope Aggregate will repair road damage that is caused by the operation of the Blue Pit.

F. Impacts to Wildlife

1. The Wildlife and Habitat Assessment is included in appendix H and states that there are no threatened or endangered species or habitats within the Blue Pit Permit Boundary.

G. Compatibility with Surrounding Land Use

1. The mining operation is offset 50 feet from the property boundary. There are no off property damages expected from the operation of the Blue Pit Expansion Area.

2. Equipment storage is not located within 300 feet of a residence.

3. Loading and unloading will be conducted primarily on the pit floor which is on private property.

4. Storage areas not associated with natural resources will be less than 10 acres.

5. All lighting of storage areas will be directed downwards and inwards and will not directly reflect to the adjacent land.

6. The Blue Pit expansion is compatible with surrounding land uses. The existing site has been a gravel pit for many years. There is an old waste dump to the east of the pit, Highway 82 well below the terrace to the south, the Blue Pit landowner (Dee Blue) owns the land to north and uses it for a tree farm and irrigated pasture. There is an area of pinyon juniper also owned by Dee Blue to the north of the eastern portion of the property. The immediate area to the west is irrigated field, however, La Farge has another gravel mining operation in the same terrace deposit approximately 2000 feet west of the west permit boundary.

7. The closest mining operation to the Blue Pit expansion is approximately 2000 feet to the west and is nearing final reclamation.

8. The hours of operation of the Blue Pit will continue to be from 7:00AM to 8:00 Monday through Saturday with crushing, mining and heavy hauling only being allowed from 7:00 AM to 7:00 PM to allow from administrative and maintenance activities to occur until 8:00 PM.

H. Reclamation / Enforcement

1. The slopes of the reclaimed land are addressed in the Reclamation Plan which is located in Exhibit C. A variance from the standard is requested for this site from 5H:1V to 3H:1V. The existing approved reclamation plan states 2.5H:1V reclaimed slopes. Mining Area 1 will be reclaimed to 2.5H:1V and Mining Areas 2-5 will be reclaimed at 3H:1V. This is milder than that currently allowed but steeper than the slope standards outlined in Section 7-840.H(1) for dryland slopes. Reasons to allow the reclaimed slopes at 3:1 are given below:

1) One of the principal reasons behind the requirement for 5:1 slopes was the focus on wet pits along the I-70 corridor. This pit is not a wet pit, since the gravel occurs in an upland terrace and it is far removed from I-70.

2) Visual concerns are an important part of the desire for 5:1 slopes, since the visual aspect of the reclamation from well traveled highways is a long term concern. This concern is well mitigated at the Blue Pit since Highway 82 is the only well traveled highway within any reasonable distance from the pit and it is located well below the active pit. No pit operation will ever be seen from Highway 82. The highway is well vegetated and will remain that way. The access road was installed years ago and its slopes are well vegetated. This road will be used for the life of the extended operation.

3) The pit is visible from some of the homes in the rural housing located north and uphill of the pit. An extensive plan has been developed that utilizes the depth of the pit, combined with sequencing and temporary reclamation, to mitigate the visual aspects of the operation from these homes. See the Visual Impact Report located in Appendix G.

4) The pre-mining use of the land is an irrigated field. The landowners desire that as much land as possible be restored to irrigated field, which will be at the bottom of the slopes. Restoring the slopes to 5:1 would greatly reduce the amount of irrigated area at the bottom, since the expected depth is approximately 90 feet.

5) The reclamation plan calls for 2 benches of 6 feet width in a slope height of 90 feet, therefore, the overall slope will be reduced from 3:1 to 3.1:1. These slopes will also be used to collect

runoff from the slope itself and reduce erosion. The 3:1 slope will be backfilled, topsoiled and reclaimed to dry rangeland, as desired by the landowner and required by the DRMS.

2. The seed mixes to be used during reclamation are outlined in the reclamation plan. The site will be continuously reclaimed as mining progresses over the next 35-40 year. This is plenty of time for the shrubs to be planted to reach the 5 gallon size. Supplemental irrigation will be used on the temporary seeded areas and only during drought conditions in the rangeland areas. The irrigated pasture areas will be irrigated.

3. Ponds will not be created in the reclamation of the Blue Pit.

4. All disturbances at the Blue Pit will be covered under the DRMS bond. Garfield County can choose to be involved in the bond recalculation process.

5. Since the DRMS reclamation permit amendment has not yet been submitted, all conditions agreed upon during the Major Impact Review will be included in the DRMS amended reclamation permit.

6. Annual reports of the reclamation progress will be submitted to Garfield County.

7. Western Slope Aggregate welcomes Garfield County Inspectors to inspect the site with site personnel upon notice.

8. Western Slope Aggregate welcomes Garfield County Inspectors to inspect the site with site personnel upon notice.

9. Other permits that are required for this site are regulated through the following agencies:

   CDPHE Air Quality Control Division 303-692-3150
   Division of Reclamation Mining and Safety 303-866-3567
   CDOT Grand Junction office 970-248-7000

   The following agencies do not regulate this site since there is not going to be a discharge to state waters from this site nor are there any wetlands on this site:

   CDPHE Water Quality Control Division 303-692-3500
   US Army Corps of Engineers 970-243-1199

10. The Garfield County Inspector will be invited to any bond release inspections and have the opportunity to demonstrate that any item of the permit has not been complied with and that the bond should not be released.

11. Western Slope Aggregates realizes that there are performance standards that lead to revocation of the Special Use Permit is continued violations of the permit occur over time.

12. All Local, State and Federal permits will be provided to Garfield County prior to issuance of the Final Special Use Approval.

13. All conditions agreed upon during the Major Impact Review will be included in the DRMS amended reclamation permit.

14. Weed control measures are described in the Reclamation Plan which is located in Exhibit C.

FIRE · EMS · RESCUE

January 29, 2010

Kathy Eastley
Garfield County Building & Planning
108 8th Street, Suite 401
Glenwood Springs, CO 81601

RE: Western Slope Aggregate Blue Pit, Special Use Permit - Amendment

Dear Kathy:

The Western Slope Aggregate Blue Pit is in the service area of the Fire District and we provide emergency fire and medical response to the gravel pit. I recent conducted at site visit and an inspection of their existing fuel storage facility at the pit. There is no proposed change to their fuel storage as a result of the proposed expansion of the gravel pit. I found the fuel storage facility to be adequate and in order and have no other issues regarding the operation of the gravel pit.

Please contact me if you have any questions or if I may be of any assistance.

Sincerely,

Bill Gavette
Deputy Chief

Carbondale & Rural Fire Protection District
300 Meadowood Drive • Carbondale, CO 81623 • 970-963-2491 Fax 970-963-0569

Western Slope Aggregate

Blue Pit SPCC Plan

January 2010

Greg Lewicki And Associates, PLLC
11541 Warrington Court Phone: (303) 346-5196 Fax (303)-346-6934
Parker, CO USA 80138 E-Mail: info@lewicki.biz

Blue Pit SPCC Plan

Table of Contents

Management Approval and Review [112.5 and 112.7(d)(2)]

Management Approval

Western Slope Aggregate, the operator of Blue Pit, is committed to the prevention of discharges of oil to navigable waters or the environment, and maintains the highest standards for spill prevention control and countermeasures through periodic review, updating, and implementation of this Spill Prevention Control and Countermeasure (SPCC) Plan. The operator will provide the manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Authorized Facility Representative: SEAN MELLO Signature: [signature]

Title: VICE PRESIDENT Date: 6-8-10

Management Review

A review and evaluation of this SPCC Plan will be conducted at least once every three years. As a result of this review and evaluation, the operator will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. This SPCC Plan will also be amended within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines. Any technical amendment to the SPCC Plan shall be certified by a Professional Engineer.

Review Dates	Signature	Amendment Required? (Y/N)

Professional Engineer's Review

[112.3 (d)(1)]

The undersigned Registered Professional Engineer is familiar with the requirements of Chapter 40 of the Code of Federal Regulations Part 112 (40 CFR 112) and has supervised examination of the facility. The undersigned Registered Professional Engineer attests that this Oil Spill Prevention Control and Countermeasure Plan has been prepared in accordance with good engineering practices including applicable industry standards, and in accordance with the requirements of Chapter 40 of the Code of Federal Regulations Part 112 (40 CFR 112); that procedures have been established for required inspections and testing; and that the Plan is adequate for the facility.

Greg Lewicki
Signature

GREG LEWICKI
Name

MANAGER
Title

GREG LEWICKI & ASSOCIATES
Company

2/2/10
Date

20335
P.E. Registration Number

1.0 Introduction

1.1 Purpose

The purpose of this Spill Prevention Control and Countermeasure (SPCC) plan is to prevent spills from occurring, and to perform safe, efficient and timely response in the event of a spill or leak (both referred to as "spills" herein). In accordance with United States Environmental Protection Agency (EPA) oil pollution prevention regulations (40 CFR 112), the operator must prepare and implement an SPCC plan for facilities that could reasonably be expected to discharge oil into or upon navigable waters or adjoining shorelines; and, meet one of the following conditions:

- Above-ground oil storage capacity exceeds 1,320 gallons; or
- Underground oil storage capacity exceeds 42,000 gallons, unless the underground tanks are subject to all of the technical requirements of 40 CFR 280 or a state program approved under 40 CFR 281. (Maine's approved program is Department of Environmental Protection, Chapter 691 – Rules for Underground Storage Facilities.)

As defined by 40 CFR Part 112, oil includes all grades of motor oil, hydraulic oil, lube oil, fuel oil, gasoline and diesel, automatic transmission fluid (ATF), waste oil, and transformer mineral oil. The definition of oil also includes non-petroleum oils such as animal or vegetable oils and synthetic oils.

1.1.1 Using the Plan

In addition to satisfying a regulatory requirement, this SPCC plan should be a working document at the facility. The plan should be used frequently in the following ways:

- As a reference for oil storage and containment system information.
- As a tool for informing new employees and refreshing existing employees on practices for preventing and responding to spills.
- As a guide to periodic training programs for employees.
- As a guide to facility inspections.
- As a resource during an emergency response.

1.1.2 SPCC Plan Revisions

The operator must revise this SPCC plan for any change in the facility design, construction, operation or maintenance that affects the facility's potential for discharging oil. Revisions must occur as soon as possible, but no later than six months after the change occurs. The Facility Manager is responsible for initiating and coordinating such revisions.

Additionally, this SPCC plan must be reviewed at least once every three years. Revisions to the plan, if any, must be made within six months of the review. Facility information related to the SPCC plan must be submitted to the United States Environmental Protection Agency (EPA) Regional Administrator whenever the facility discharges more than 1,000 gallons in a single event, or discharges more than 42 gallons of oil in each of two spill events within a 12-month period.

1.2 Facility Description [112.7(a)(3)]

1.2.1 Location and Use

The Blue Pit is located approximately 2.5 miles east of Carbondale, CO on Highway 82. The Blue Pit is separated from the Roaring Fork River Valley by an 80' tall natural slope which remains after removing the gravel from an elevated alluvial terrace. The site has been mined since 1981 under the state Reclamation Permit # M-1981-207. Western Slope Aggregate has operated the site since 1991. The site has been mined since the early 1980's and has expanded to an annual production rate of approximately 450,000 tons per year.

This site is a dry alluvial terrace and mining will be conducted above the groundwater level. There will be no dewatering or water discharge from this site. All maps referred to in this plan can be found in the Colorado Division of Reclamation, Mining and Safety permit application.

Once the pit has been dewatered, mining will begin. Primarily, front-end loaders will be used to mine the raw gravel. The slopes of the pit will be mined to 1.5H:1V slopes. Some dozer pushing or ripping may also be used. The loader will directly load to a primary crusher or into trucks which will deliver the material to the crusher. The crushing equipment is powered by an overhead power line and does need diesel power for operation.

1.2.2 Waterways and Abutters

There are two irrigation ditches on site and are used to supply irrigation water to the Blue property as well as property to the west of the site. There is no petroleum product storage near these ditches.

Once all mining has been completed the land will be reclaimed to irrigated pasture and rangeland. After reclamation all on site stormwater will infiltrate into the underlying groundwater.

1.2.3 Site Drainage

Drainage will be directed into the pit bottom where it will infiltrate into the porous alluvial material.

2.0 Potential Spill Sources and SPCC Features

2.1 SPCC Compliance [112.7(a)(1) and 112.7(a)(2) and 112.8

The only permanent spill source onsite will be the fuel storage area. All other fuel tanks are associated with the mobile equipment or the concrete plant which is owned and operated by a different company, Casey Concrete.

2.2 Tables [112.7(a)(3)(i and iii) and 112.7(b)]

Fuel/Oil Dispensers

Location	Product / Size	Spill direction
Fuel Containment Area South of Shop	Dyed Diesel -10,000 gallon	Concrete Secondary Containment
Fuel Containment Area South of Shop	Highway Diesel -10,000 gallon	Concrete Secondary Containment
Fuel Containment Area South of Shop	Gasoline -3,000 gallon	Concrete Secondary Containment

Mobile Equipment

Name	Quantity	Fuel Tank (gal)	Hydraulic System (gal)
Wheel Loader	3	75	40
D8 Dozer	1	165	19

Note: This list is an estimate of on-site equipment. Equipment may vary. Equipment manufacturer may also vary. Tank sizes are based on Cat equipment.

CONSENT TO APPLICATION

The undersigned, DEE BLUE, individually, and as Trustee of the Jean M. Blue Revocable Trust, collectively the Owners of that real property more particularly described within the enclosed Application for Major Impact Review Permit, hereby consents to the filing and processing of said Application by Western Slope Aggregates, Inc., a Colorado corporation.

Dee Blue

3.0 Spill Prevention and Response

3.1 Discharge Prevention

3.1.1 SPCC Features and Operating Procedures [112. 7(a)(3) and 112.8]

The operator's employees are trained to implement spill prevention practices for work with and around oil sources. Personnel shall use common sense and rely on spill prevention practices at all times to minimize the potential for a release of oil.

For example, the following "common sense" practices are recommended:

- keep container lids securely fastened at all times;
- do not leave portable sources unattended;
- return portable sources to their storage location after use;
- use pads, drip pans, and funnels when transferring petroleum products from a portable container;
- protect oil sources from damage by moving equipment;
- do not store oil sources near catch basins or floor drains; and
- loading and unloading of petroleum products shall be attended at all times.

Suppliers

All suppliers will meet the minimum requirements and regulations for tank truck unloading as established by the United States Department of Transportation. These supplier procedures also ensure that the vendor understands the site layout, knows the protocols for entering the site and unloading product, and has the necessary spill equipment on board to respond to a spill from the vehicle or fuel delivery hose.

Observations of Deliveries

The Facility Manager or designee will supervise deliveries for all new suppliers and will periodically observe deliveries for existing, approved suppliers. Delivery observations include:

- vehicle inspection prior to delivery and departure (e.g., to make sure the driver does not drive away with the hose in the fill pipe);
- inquiry to ensure the truck contains the right product for the tank;
- assurance that the tank can hold what the supplier intends to deliver; and
- adequate spill response equipment is on board the vehicle

Vehicle Filling

Loading operations and vehicle fueling operations will be performed by facility personnel trained in the specific operation. The operators will:

- check that the vehicle is properly secured before making connections,
- inspect the storage and delivery system, hoses, connections and the receiving vessel before beginning operations,
- monitor the transfer operation in-person from beginning to end,
- check that the vehicle has been disconnected before departure,

- secure the storage and delivery system after use, and
- Facility personnel will monitor the fueling area for safe and proper operation, and will take immediate action to correct any deficiencies.

3.1.2 Tests and Inspections [112.7(e) and 112.8 (c) (6)]

The personnel at the facility shall perform testing, inspection, and maintenance of all petroleum equipment to keep it performing in an efficient and environmentally sound manner. The tests and inspections shall be performed as discussed in the following subsections.

3.1.2.1 Inspecting AST's

Facility personnel periodically observe the ASTs during operating hours. The ASTs shall be inspected monthly, and the results shall be recorded on the Monthly AST Inspection Report, as included in Appendix E. Spill response kits kept on site shall also be checked during the monthly AST inspection, and restocked as necessary. The monthly inspection reports shall be kept for at least three years in a file maintained by the Facility

Manager. Inspections include observations of the exterior of the tank for signs of deterioration or spills (leaks), observations of the tank foundation and supports for signs of instability, and observations of the vent, fill and discharge pipes for signs of poor connection, that could cause a spill. Check for accumulation of precipitation. In addition to these monthly inspections, the facility will periodically verify the integrity of each tank every ten years, or more often as deemed necessary by the inspection results. Integrity testing will be conducted in accordance with an industry standard procedure such as STI – SP001-03 or API 653.

3.1.2.1 Tank Maintenance

All petroleum tank and piping problems shall be immediately reported to the Facility Manager. Visible oil spills (leaks) that cause a loss of oil from tank walls, piping or other components shall be repaired or replaced as soon as possible to prevent the potential for a major spill from the source. This is especially important for sources located outside or near drains or catch basins that discharge to the environment.

3.1.3 Training [112.7(f)]

The operator shall provide SPCC spill training for personnel involved with handling petroleum products. The Facility Manager shall arrange for annual training, which shall include the following training topics:

- an introduction to pollution control laws;
- rules and regulations pertaining to the use and storage of petroleum products;
- inspection, operation and maintenance of spill equipment, and petroleum storage and dispensing equipment;
- spill response and cleanup;
- spill notification and record keeping; and
- spill prevention practices.

Records of attendance at training and topics covered shall be maintained by the Facility Manager.

3.1.2.2 Documentation for Training

The annual SPCC training shall be documented to include the instructor's name, course outline, date and duration of training, attendant's names and signatures, and corrective action list for areas in need of improvement, if any. This information shall be filed and maintained for at least 3 years at the office of the Environmental Compliance Officer. A Certificate of Training shall be presented to each employee that has completed the training.

3.1.4 Security [112.7(g)]

No security issues are expected on this site.

3.2 Emergency Response [112.7(a)(3)(iv) and 112.7(c)]

This section describes the cleanup response and protocols to follow in the event of an oil spill. The uncontrolled discharge of oil to groundwater, surface water or soil is prohibited by State or Federal laws. It is imperative that action be taken to respond to a spill once it has occurred. In the event of an oil spill, depending on the volume and characteristics of the material released, the operator has defined spill response as either a "Minor Spill Response" or "Major Spill Response" ("Spill Emergency"). A list of Emergency Contacts is included in Appendix A.

3.2.1 Minor Spill Response [112. 7(a)(3)(iv)]

A "Minor Spill Response" is defined as one that poses no significant harm to human health or the environment. These spills involve generally less than 5 gallons and can usually be cleaned up by the operator's personnel. Other characteristics of a minor spill include the following:

- the spilled material is easily stopped or controlled at the time of the spill;
- the spill is localized;
- the spilled material is not likely to reach surface water or groundwater;
- there is little danger to human health; and
- there is little danger of fire or explosion

In the event of a minor spill the following guidelines shall apply:

1. Immediately notify the senior on-site person (i.e., Facility Manager).
2. Call the Colorado Department of Public Health and Environment, Colorado Division of Reclamation Mining and Safety, City of Carbondale, and the Garfield County Environmental Health Department within two hours. Document the telephone calls on the Spill Notification Form in Appendix B.
3. Under the direction of a senior on-site person, contain the spill with spill response materials and equipment.
4. Place spill debris in properly labeled waste containers.
5. Complete the Spill Notification Form (Appendix B) and send to the Environmental Compliance Officer.

3.2.2 Major Spill Response (Spill Emergency) [112. 7(a)(3)(iv)]

A "Spill Emergency" is defined as one involving a spill that cannot be safely controlled or cleaned up. Characteristics include the following:

- the spill is large enough to spread beyond the immediate spill area;
- the spilled material enters surface water or groundwater (regardless of spill size);
- the spill requires special training and equipment to cleanup;
- the spilled material is dangerous to human health; and
- there is a danger of fire or explosion

In the event of a spill emergency the following guidelines shall apply:

1. All workers shall immediately evacuate the spill site and move to a safe distance away from the spill.
2. A senior on-site person shall call for medical assistance if workers are injured (no worker shall engage in rescue operations unless they have been properly trained and equipped).
3. A senior on-site person shall immediately call the Colorado Department of Public Health and Environment, Colorado Division of Reclamation Mining and Safety, City of Carbondale, and the Garfield County Environmental Health Department within two hours. Document the telephone calls on the Spill Notification Form in Appendix B.
4. Notify the local Fire Department or Police Department.
5. A senior on-site person shall contact the Facility Manager and provide details regarding the spill.
6. The Facility Manager will coordinate cleanup and seek assistance from a cleanup contractor as necessary.

If a senior on-site person is not available at the time of the spill, then the next highest employee in command shall assume responsibility.

3.2.3 Waste Disposal [112. 7(a)(3)(v)]

Wastes resulting from a minor spill response will be containerized in impervious bags, drums or buckets. The waste will be removed from the site by a licensed waste hauler within two weeks. Wastes resulting from a major spill response will be removed and disposed of by a cleanup contractor.

3.2.4 Waste Disposal [112. 7(a)(4)]

In the event of a minor spill, a senior on-site person shall notify the Facility Manager and complete a written Spill Notification Form. This form details the time, material, and quantity of oil released.

If a major spill occurs at this facility the Facility Manager shall, in addition to the notification procedures above, provide written information to the EPA Regional Administrator as required by the SPCC Plan rules.

3.2.4.1 Spill Notification Forms

After making the appropriate phone calls and the spill is contained, a Spill Notification Form, included in Appendix B, shall be completed and submitted to the Facility Manager. The Spill Notification Form includes a checklist to document the proper notification of state and federal agencies. The form shall be filed and maintained as long as operator owns and/or operates this facility.

4.0 Required Improvements

The Professional Engineer's certification of this plan is contingent on the following facility improvements being implemented for compliance with SPCC regulations 40 CFR 112:

1. No Changes Needed

Appendix A
Emergency Contacts [112.7(a)(3)(vi)]

Emergency Contacts

Spill Reporting	Telephone #
EPA	(800) 424-8802
Colorado Dept. of Health and Environment	(877) 518-5608
Colorado DRMS	(303) 866-3567
City of Carbondale	(970) 963-2733
Local Health Department	(970) 945-6614
MSHA	(303) 231-5465

Local Emergency Agencies	Telephone #
Fire Department	911
Sheriff/Police	911

Spill Response Contractors	Telephone #
Greg Lewicki and Associates	(303) 346-5196
Adequate Heavy Equipment Kept Onsite for Rapid Spill Response	

Owner/Operator	Telephone #
Western Slope Aggregate	(970) 963-2296

Appendix B

Spill Notification Form

Spill Notification Form

Part A: Basic Spill Data	
Spill Type: Major / Minor	**Spill Date:**
Type of Spilled Substance:	**Spill Time:**
Quantity Spilled:	**Spill Duration:**
Facility Name: **Blue Pit**	**Location of Spill:**
Owner / Company Name: **Western Slope** **Aggregate**	**Released to: [ ] Containment [ ] River** **[ ] Pond [ ] Soil [ ] Air [ ] Ground Water** **[ ] Other**
Nature of spill and any environmental or health effects:	**[ ] Injuries [ ] Fatalitie**

Part B: Notification Checklist		
	Notification Date and Time	**Name of Person the Recieved Call**
Spill is any amount of petroleum product:		
Colorado Department of Public Health and Environment (877) 518-5608		
Local Health Department (970) 945-6614		
City of Carbondale (970) 963-2733		
Colorado Division of Reclamation, Mining and Safety (303) 866-3567		
MSHA (303) 231-5465		
Spill reaches ground water or surface water:		
EPA National Response Center (800) 424-8802		

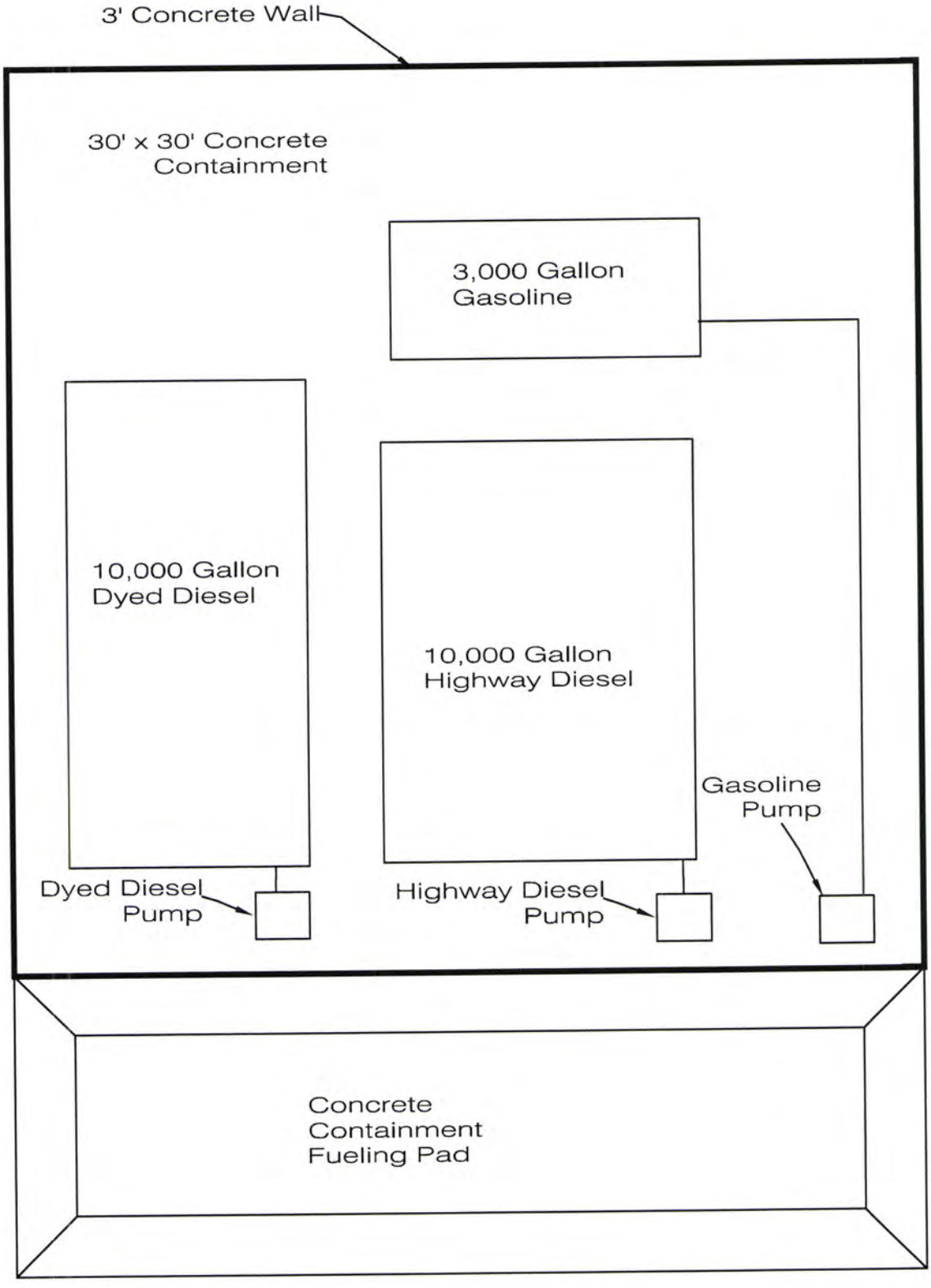
Form Completed By (Print Name): **Sign and Date:**

This form must be submitted to Enviromental Officer. A copy must be retained on-site and included with the SPCC Plan.

Appendix C

Fuel Containment Figure [1 12.7(a)(3)]

Please Also See DRMS Permit Map C-2



Notes:

Revisions	BY	DATE

DES	RE
DRN	RE
CHK	
APPD	

DATE 1/12/10

SCALE 1"=5'

Greg Lowich And Associates

Fuel Containment Figure
SPCC Plan
Blue Pit

Appendix D

Substantial Harm Criteria Checklist [112.20(e)]

Substantial Harm Criteria Checklist for Certification of Applicability [112.20 (e)]

Facility Name: Blue Pit

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
Yes ____ No _____

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest above-ground oil storage tank plus sufficient freeboard to allow for precipitation within any above-ground oil storage tank area? Yes ____ No _____

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?
Yes ____ No _____

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?
Yes ____ No _____

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
Yes ____ No ____

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

_____ _____

_____ _____

Appendix E

AST Inspection Checklist

Blue Pit AST Checklist

Tank	Condition of Tank(Note any deformations, corrosion, staining, etc.)	Condition of Secondary Containment (Note any cracks, drain valve, closed/locked, etc.)	Foundation/tank Base (Note any staining, spills, water against base, etc.)	Pumps and Piping	Hose and Fittings	Nearest Spill Kit (Notes kit contains all components)

CERTIFICATION

I certify under penalty of law that I have personally examined the above listed items. I believe that the submitted information is true, accurate, and complete.

Name (please, type or print) _____ Signature _____

Title _____ Date _____

Appendix F

Employee Training Log

Employee Training Log

Note: New employees shall receive initial training in the contents and implementation of this SPCC plan upon start of their employment. All employees shall receive annual refresher training in the contents and implementation of this SPCC plan.

Date of Training	**Name of Employee Attending**	**Topics Covered**	**Instructor(s)**

Spill Response Procedures

A minor spill occurs when:

- The spill is generally less than 5 gallons.
- The spill is localized or contained in one area.
- The spill is not likely to reach ground or surface water.
- There is little danger to human health.
- There is little danger of fire or explosion.

A major spill occurs when:

- The spill cannot be contained in a small area.
- The spilled material enters surface water or ground water.
- The spill requires special training and equipment to cleanup.
- The spill is dangerous to human life.
- There is danger of fire or explosion.

A minor spill should be handled as follows:

1 .Immediately notify the senior on-site person.

2.Call (within 2 hours of the spill)

- Colorado Department of Public Health and Environment (877) 518-5608
- Colorado Division of Minerals and Geology (303) 866-3567
- Local Health Department

3 .Under direction of a senior on-site person, contain the spill the materials from the spill response kit.

4.Place spill debris in a properly labeled waste container.

5.Complete the Spill Notification Form in the onsite SPCC Plan and send to the Facility

A major spill should be handled as follows:

1 .All workers shall immediately evacuate the spill site and move to a safe distance away from the spill.

2.A senior on-site person shall call for medical assistance if workers are

3 .Call (within 2 hours of the spill)

- Colorado Department of Public Health and Environment
- Colorado Division of Minerals and Geology
- Local
- MSHA
- EPA
- Local Fire or Sheriff
- Facility Manager

4.The Facility Manager will coordinate cleanup and seek assistance from a cleanup contractor as necessary.

5.Complete the Spill Notification Form in the onsite SPCC Plan and send to the Facility Manger

MAPS

APPENDIX B

CDOT ACCESS PERMIT

APPENDIX C

COLORADO DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ACCESS PERMIT

Local Jurisdiction: Garfield
Dist/Section/Patrol: 03/32/16
DOT Permit No.: 396055
Permit Fee: 0.00
Date of Transmittal: 03/21/96

HE PERMITTEE;

Jean M. & Dee Blue
0404 County Road 104
Carbondale, CO 81623

Jean M. & Dee Blue - (970) 963-2653

APPLICANT:
Western Slope Aggregates, Inc.

P. O. Box 910
0242 County Road 104
Carbondale, CO 81623
(970) 963-2296

is hereby granted permission to construct and use an access to the state highway at the location noted below. The access shall be constructed, maintained and used in accordance with the terms and conditions of this permit, including the State Highway Access Code and listed attachments. This permit may be revoked by the issuing authority if at any time the permitted access and its use violate any of the terms and conditions of this permit. The use of advance warning and construction signs, flashers, barricades and flaggers are required at all times during access construction within State right-of-way in conformance with the MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, Part VI. The issuing authority, the Department and their duly appointed agents and employees shall be held harmless against any action for personal injury or property damage sustained by reason of the exercise of the permit.

OCATION:

On the north side of State Highway 82, a distance of 3696 feet east from Mile Post 14; 0242 County Road 104; Carbondale.

\CCESS TO PROVIDE SERVICE TO:

	PERCENT
General Light Industrial (110 Acres).....	100.00 %

)THER TERMS AND CONDITIONS:

SEE ATTACHED SHEET(S) FOR TERMS AND CONDITIONS

MUNICIPALITY OR COUNTY APPROVAL

Required only when the appropriate local authority retains issuing authority.

By (X) _____ Date _____ Title _____

Upon the signing of this permit the permittee agrees to the terms and conditions and referenced attachments contained herein. All construction shall be completed in an expeditious and safe manner and shall be finished within 45 days from initiation. The permitted access shall be completed in accordance with the terms and conditions of the permit prior to being used. **The permittee shall notify** Mike Moore **with the Colorado Department of Transportation in** Basalt at 970-927-3137, **at least 48 hours prior to commencing construction within the State Highway right-of-way.**

The person signing as the permittee must be the owner or legal representative of the property served by the permitted access and have full authority to accept the permit and all it's terms and conditions.

Permittee (X) Jean M Blue Dee Blue Date 3/27/96

This permit is not valid until signed by a duly authorized representative of the Department.
DEPARTMENT OF TRANSPORTATION, STATE OF COLORADO

By (X) _____ Date 3/24/96 (Date of issue) Title Access Coordinator

:OPY DISTRIBUTION: Required: 1. District (Original) Make copies as necessary for: Local Authority Inspector

Previous Editions are Obsolete and will not be used
CDOT Form #101

The following paragraph are pertinent highlights of the State Highway Access Code. These are provided for your convenience but do not alleviate compliance with all sections of the Access Code. A copy of the State Highway Access Code is available from your local issuing authority (local government) or the Colorado Department of Transportation (Department). When this permit was issued, the issuing authority made its decision based in part on information submitted by the applicant, on the access category which is assigned to the highway, what alternative access to other public roads and streets is available, and safety and design standards. Changes in use or design not approved by the permit or the issuing authority may cause the revocation or suspension of the permit.

I **Appeals**

1. Should the permittee or applicant chose to object to any of the terms or conditions of the permit placed therein by the Department, an appeal must be filed with the Colorado Transportation Commission within 60 days of transmittal of the permit for permittee signature. The request for the hearing shall be filed in writing and submitted to the Colorado Transportation Commission, 4201 East Arkansas Avenue, Denver, Colorado 80222. The request shall include reasons for the appeal and may include recommendations by the permittee or applicant that would be acceptable to him.

2. The Department may consider any objections and requested revisions at the request of the applicant or permittee. If agreement is reached, the Department, with the approval of the local issuing authority (if applicable), may revise the permit accordingly, or issue a new permit, or require the applicant to submit a new application for reconsideration. Changes in the original application, proposed design or access use will normally require submittal of a new application.

3. Regardless of any communications, meetings, or negotiations with the Department regarding revisions and objections to the permit, if the permittee or applicant wishes to appeal the Department's decision to the Commission, the appeal must be brought to the Commission within 60 days of transmittal of the permit.

4. Any appeal by the applicant or permittee of action by the local issuing authority when it is the appropriate local authority (under subsection 2.4), shall be filed with the local authority and be consistent with the appeal procedures of the local authority.

5. If the final action is not further appealed, the Department or local authority may record the decision with the County Clerk and Recorder.

II **Construction standards and requirements**

1. The access must be under construction within one year of the permit date. However, under certain conditions a one year time extension may be granted if requested in writing prior to permit expiration.

2. The applicant shall notify the office specified on the permit at least 48 hours prior to construction. A copy of the permit shall be available for review at the construction site. Inspections will be made during construction.

3. The access construction within highway right-of-way must be completed within 45 days.

4. It is the responsibility of the permittee to complete the construction of the access according to the terms and conditions of the permit. If the permittee wishes to use the access prior to completion, arrangements must be approved by the issuing authority and Department and included on the permit. The Department or issuing authority may order a halt to any unauthorized use of the access. Reconstruction or improvements to the access may be required when the permittee has failed to meet required specifications of design or materials. If any construction element fails within two years due to improper construction or material specifications, the permittee is responsible for all repairs.

5. In the event it becomes necessary to remove any right-of-way fence, the posts on either side of the access shall be securely braced with an approved end post before the fence is cut to prevent any slacking of the remaining fence. All posts and wire removed are Department property and shall be turned over to a representative of the Department.

6. A copy of the permit shall be available for review at the construction site. If necessary, minor changes and additions shall be ordered by the Department or local authority field inspector to meet unanticipated site conditions.

7. The access shall be constructed and maintained in a manner that shall not cause water to enter onto the roadway, and shall not interfere with the drainage system in the right-of-way.

8. Where necessary to remove, relocate, or repair a traffic control device or public or private utilities for the construction of a permitted access, the work shall be accomplished by the permittee without cost to the Department or issuing authority, and at the direction of the Department or utility company. Any damage to the state highway or other public right-of-way beyond that which is allowed in the permit shall be repaired immediately.

9. Adequate advance warning is required at all times during access construction, in conformance with the Manual on Uniform Traffic Control Devices for Streets and Highways. This may include the use of signs, flashers, barricades and flaggers. This is also requiredby section 42-4-501,C.R.S. as amended. The issuing authority, the Department and their duly appointed agents and employees shall be held harmless against any action for personal injury or property damage sustained by reason of the exercise of the permit.

III **Changes in use and violations**

1. If there are changes in the use of the access, the access permit-issuing authority must be notified of the change. A change in property use which makes the existing access design or use in non-conformance with the Access Code or the terms and conditions of the permit, may require the reconstruction or relocation of the access. Examples of changes in access use are; an increase in vehicular volume by 20 percent, or an increase by 20 percent of a directional characteristic such as a left turn. The issuing authority will review the original permit; it may decide it is adequate or request that you apply for a new permit.

2. All terms and conditions of the permit are binding upon all assigns, successors-in-interest and heirs.

3. When a permitted driveway is constructed or used in violation of the Access Code, the local government or Department may obtain a court order to halt the violation. Such access permits may be revoked by the issuing authority.

IV **Further information**

1. When the permit holder wishes to make improvements to an existing legal access, he shall make his request by filing a completed permit application form with the issuing authority. The issuing authority may take action only on the request for improvement. Denial does not revoke the existing access.

2. The permittee, his heirs, successors-in-interest, and assigns, of the property serviced by the access shall be responsible for meeting the terms and conditions of the permit and the removal or clearance of snow or ice upon the access even though deposited on the access in the course of Department snow removal operations. The Department shall maintain in unincorporated areas the highway drainage system, including those culverts under the access which are part of that system within the right-of-way.

3. The issue date of the permit is the date the Department representative signs the permit which is after the permittee has returned the permit signed and paid any required fees.

4. The Department may, when necessary for the improved safety and operation of the roadway, rebuild, modify, remove, or redesign the highway including any auxiliary lane.

5. Any driveway, whether constructed before, on, or after June 30, 1979, may be required by the Department, with written concurrence of the appropriate local authority, to be reconstructed or relocated to conform to the Access Code, either at the property owner's expense if the reconstruction or relocation is necessitated by a change in the use of the property which results in a change in the type of driveway operation; or at the expense of the Department if the reconstruction or relocation is necessitated by changes in road or traffic conditions. The necessity for the relocation or reconstruction shall

TERMS AND CONDITIONS

1. If there are any questions regarding this permit, please contact Charles Dunn at (970) 248-7234.

2. The Permittee shall refer to all additional standard requirements on the back of this permit and any enclosed additional terms, conditions, exhibits and noted attachments.

3. This permitted access is only for the use and purpose stated in the Application and Permit.

4. The Permittee is responsible for obtaining any necessary additional federal, state and/or City/County permits or clearances required for construction of the access. Approval of this access permit does not constitute verification of this action by the Permittee.

5. The Permittee shall submit a survey plat, warranty deed and legal description for all property to be dedicated to the Department as new right-of-way.

6. The Permittee shall provide the Department a copy of the recorded final plat.

7. Any work within State Highway right-of-way shall begin after 8:30 A.M. and all work and equipment shall be off the highway BEFORE 3:30 P.M. each day.

8. It is the responsibility of the Permittee to prevent all livestock from entering the State Highway right-of-way at this access location. Any livestock that does enter the highway right-of-way shall be the sole responsibility of the Permittee.

9. A FULLY EXECUTED COMPLETE COPY OF THIS PERMIT MUST BE ON THE JOB SITE WITH THE CONTRACTOR AT ALL TIMES DURING THE CONSTRUCTION. FAILURE TO COMPLY WITH THIS OR ANY OTHER CONSTRUCTION REQUIREMENT MAY RESULT IN THE IMMEDIATE SUSPENSION OF WORK BY ORDER OF THE DEPARTMENT INSPECTOR OR THE ISSUING AUTHORITY.

10. All materials, equipment, installation, construction and design, including the auxiliary lane(s) and intersection improvement(s) within the State Highway shall be in accordance with the following Department standard references, as applicable:
    a. Roadway Design Manual
    b. Materials Manual
    c. Construction Manual
    d. Standard Specifications for Road and Bridge Construction, latest edition
    e. Colorado Standard Plans (M & S Standards)
    f. Manual on Uniform Traffic Control Devices (M.U.T.C.D.) for Streets and Highways and the Colorado Supplement thereto
    g. A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials (AASHTO), latest edition
    h. Institute of Transportation Engineer's Trip Generation manual, latest edition
    i. State Highway Access Code 2 CCR 601-1
    j. Roadside Design Guide

    Some of the reference materials listed above (a through e) may be purchased from:
    Colorado Department of Transportation
    Bid Plans Room
    4201 East Arkansas Avenue
    Denver, Colorado 80222-3400

TERMS AND CONDITIONS (CONT'D)

Telephone Number: (303) 757-9313
The Access Code may be purchased from:
The Public Record Corporation
1666 Lafayette Street
P.O. Box 18186
Denver, Colorado 80218
Telephone Number: (303) 832-8262

11. Survey markers or monuments must be preserved in their original positions. Notify the Department at (970) 248-7220 immediately upon damage to or discovery of any such markers or monuments at the work site. Any survey markers or monuments disturbed during the execution of this permit shall be repaired and/or replaced immediately at the expense of the Permittee.

12. Prior to starting construction or any work within the State Highway right-of-way, the Permittee/contractor must provide the following to the Department:
A. A construction traffic control plan prepared by a professional traffic engineer or an individual certified by the American Traffic Safety Services Association (ATSSA), using the latest edition of Manual on Uniform Traffic Control Devices and other applicable standards. The plan must be submitted a minimum of 72 hours in advance of construction.
B. A copy of the work and phasing schedule.

13. The Permittee, through a Colorado registered professional engineer shall provide design, construction, pavement striping and signing plans to the Department for approval 45 days prior to commencement of any work. Design plans must include but not limited to layout of speed change lanes, utility locations, present and proposed drainage, present and proposed right-of-way lines, traffic control plan (if any), present and proposed traffic control devices, cross sections on 50 foot intervals and clear zone analysis. (Par. 4.10.17, 2 CCR 601-1)

14. Upon completion of the work, the Permittee/Contractor/Engineer shall submit an "As Built" plan, showing in detail all construction changes, modifications and revisions. All changes, modifications or revisions shall be stamped by a Colorado registered professional engineer.

15. It shall be the responsibility of the Permittee to verify the location of the existing utilities and notify all utility owners or operators of any work that might involve utilities within the State Highway right-of-way. Any work necessary to protect existing permitted utilities, such as an encasement will be the responsibility of the Permittee. Any damage or disruption to any utilities during the construction shall be the Permittee's responsibility and shall be repaired or replaced at no cost to the Department.

16. Any damage to any present highway facilities including traffic control devices shall be repaired immediately at no cost to the Department and prior to continuing other work. Any mud or other material tracked or otherwise deposited on the roadway shall be removed daily or as ordered by the Department inspector.

17. Areas of roadway and/or right-of-way disturbed during this installation shall be restored to their origional conditions, to insure proper strength, drainage and erosion control.

TERMS AND CONDITIONS (CONT'D)

18. Any incomplete construction activity on the State Highway that must be left overnight, shall be barricaded and signed in accordance with the Manual on Uniform Traffic Control Devices and other applicable standards.

19. Open cuts which are 6 inches in depth, within 30 feet of the edge of the State Highway traveled way will not be left open at night, on weekends, or on holidays.

20. No more than 6 feet of trench areas shall be opened at any one time. Open trenches and other excavations within the State Highway right-of-way shall be backfilled and/or paved before 3:30 P.M. of each working day or be protected in accordance with the M.U.T.C.D..

21. The area around the new work shall be well graded to drain, top soiled, fertilized, mulched and re-seeded in accordance with the Department standard specifications.

22. When it is necessary to remove any highway right-of-way fence, the posts on either side of the access entrance shall be securely braced with approved end posts and in conformance with the Department's M-607-1 standard, before the fence is cut, to prevent slacking of the remaining fence. All posts and wire removed shall be returned to the Department.

23. Highway widening for the right turn deceleration lane shall be 12 feet wide and 485 long, including a 270 foot taper.

24. Highway widening for the right turn acceleration lane shall be 12 feet wide and 960 feet long, including a 270 foot taper.

25. A left turn lane shall be installed. The deceleration portion shall be 16 feet wide and 485 feet long, including a 270 foot taper. Redirect tapers for through traffic shall be at a 50 to 1 ratio.

26. The left turn acceleration lane shall be 16 feet wide, with an approximate total length of 960 feet. The components of the lane will be a 690 foot acceleration length and a 270 foot taper.

27. All excavations for utility lines, culverts, trenches or tunnels shall meet the requirements of the Occupational, Safety and Health Administration (OSHA), Colorado Industrial Commission, Colorado Division of Mines or the Colorado Department of Transportation, whichever applies.

28. All work that requires traffic control shall be supervised by a registered professional traffic engineer or by a traffic control supervisor certified by the American Traffic Safety Services Association (ATSSA) or the Colorado Contractors Association (CCA). When flagging personnel are required, they shall be certified by the contractor in accordance with the Department standards.

29. Construction traffic control devices, when not in use, shall be removed or turned away from traffic.

30. All temporary pavement striping shall be done by the Permittee/contractor in comformance with section 627 of the Department's standard specifications for Road and Bridge Construction (latest edition).

TERMS AND CONDITIONS (CONT'D)

31. All final signing and pavement striping shall be done by the Permittee or the contractor in conformance with the Department's M & S standards and the M.U.T.C.D., unless otherwise agreed to by the Department and the Permittee. A final signing and pavement striping plan shall be submitted to the Region 3 Traffic Engineer a minimum of 45 working days prior to commencement of work. No work shall begin without prior approval and authorization from the Department.

32. The roadway shoulder shall be widened to 4 feet along the speed change lanes and surfaced with HBP in accordance with the Department specifications. The shoulder widening along through lanes shall be no less than 4 feet paved or match existing and paved.

33. The access shall be constructed perpendicular to the travel lanes of the State Highway for a minimum distance of 50 feet, and shall slope down and away from the adjacent pavement edge at a rate of 2% grade for a minimum of 20 feet. If curb and gutter are present, the slope shall be calculated from pan line to pan line. Any revisions to this requirement shall be subject to Department review and approval prior to commencement of any work within the highway right-of-way.

34. The access shall be completed in an expeditious and safe manner and shall be finished within 45 days from initiation of construction within State Highway right-of-way.

35. Pursuant to section 4.10.2 of the State Highway Access Code, the access roadway shall not exceed a maximum grade of 10 percent within the highway right-of-way, as measured 50 feet beyond the pavement edge and extending to the right-of-way line. The access vertical grade shall be designed and constructed in conformance with the Department M & S standard M-203-1.

36. The design of the horizontal and vertical sight distance shall be no less than the minimum requirements, as provided in section 4.9 of the State Highway Access Code, 2 CCR 601-1.

37. All required access improvements shall be installed prior to the herein authorized use of this access.

38. The access shall be surfaced immediately upon completion of earthwork construction and prior to use.

39. Compaction of Hot Bituminous Pavement shall be in accordance with section 401.17 of the Department's standard specifications. Compaction of the Aggregate Base Course shall comply with section 304.06.

40. Compaction of subgrade, embankments and backfill shall be in accordance to section 203.07 of the Department's standard specifications with the test results sent to and approved by the Department inspector.

41. Placement of base course materials shall be in accordance with section 304.04 of the standard specifications. Compaction shall be in conformance with AASHTO procedure T-99.

42. The surfacing shall meet the Department's specifications with the following material placed for final grade: 12 inches ABC, Class 1; 6 inches ABC, Class 6 and 4 inches of

TERMS AND CONDITIONS (CONT'D)

Hot Bituminous Pavement (Grading C or CX) placed in the following lifts: 2 - 6 inch lifts Class 1; 1 - 6 inch lift Class 6; 2 - 2 inch lifts HBP.

43. The new State Highway pavement shall slope on the same plane as the present pavement surface.

44. Slopes shall be at a 6 to 1 ratio on the roadway and a 6 to 1 ratio on the approach.

45. The existing asphalt adjacent to all new pavement shall be saw cut and removed a minimum of one foot back from the existing edge, or until an acceptable existing cross slope is achieved to assure a straight edge for the joint.

46. The top layer of plant mix bituminous pavement shall not be placed between October 1 and April 1, unless oterwise approved by the Department.

47. If frost, water or moisture is present in the subgrade, no surfacing materials shall be placed until all frost, water or moisture is gone or removed.

48. No drainage from this site shall enter onto the State Highway travel lanes. The Permittee may be required to detain all drainage in excess of historical flows on site.

49. All existing drainage structures shall be extended, modified or upgraded, as applicable, to accommodate all new construction and safety standards, in accordance with the Department's standard specifications.

50. All culverts installed in open ditches shall have flared end sections.

Kimley-Horn
and Associates, Inc.

April 6, 2010

Suite 450
990 South Broadway
Denver, Colorado
80209

Tom Veljic
Garfield County
108 Eigth Street
Glenwood Springs, CO 81601

Re: Blue Gravel Pit – Traffic Evaluation
SH-82 and Blue Road/CR-103

Dear Mr. Veljic:

It is understood that Western Slope Aggregate Inc. has requested a change in location of current excavations for the Blue gravel pit, located along the north side of SH-82 at the Blue Road/CR-103 intersection in Garfield County, Colorado. Although the proposal is to change location, the overall pit excavation area and access will remain the same. Western Slope Aggregate has identified that with the change in excavation location, the existing operations will be maintained. Please see attached letters from Western Slope Aggregate and Lewicki and Associates describing existing operations and proposed excavation areas. Therefore, based on this information and that the excavation area will remain under the CDOT Access Permit identified 110 acres for this same use, we believe that Blue gravel pit will be in compliance with the existing access permit.

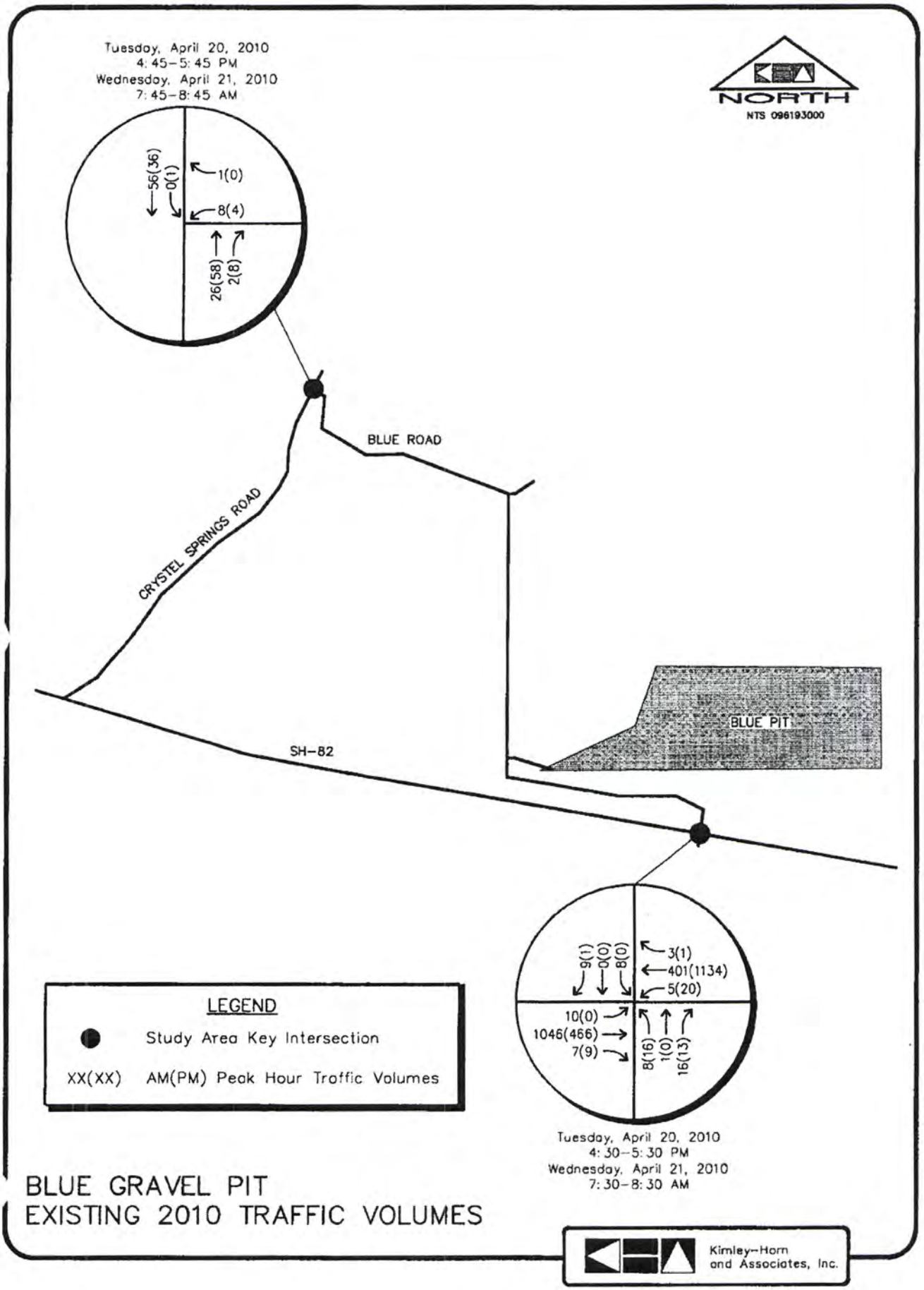
Based on the operations remaining the same for the existing Blue gravel pit, the amount of existing traffic generated by the gravel pit is not anticipated to change in the future due to the excavation location change. No increase in traffic volumes are anticipated along CR-104, CR-103, or SH-82 due to the Blue gravel pit excavation location change. Therefore, we believe a traffic impact study for a relocation of excavation area should not be needed or required. If you have any questions or need anything further, please feel free to call me at (303) 228-2304.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Curtis D. Rowe, P.E., PTOE
Vice President

TEL 303 228 2300
FAX 303 446 8678


Tuesday, April 20, 2010
4:45-5:45 PM
Wednesday, April 21, 2010
7:45-8:45 AM
NORTH
NTS 096193000
56(36)
0(1)
1(0)
8(4)
26(58)
2(8)
BLUE ROAD
CRYSTEL SPRINGS ROAD
BLUE PIT
SH-82
9(1)
0(0)
8(0)
3(1)
401(1134)
5(20)
10(0)
1046(466)
7(9)
8(16)
1(0)
16(13)
LEGEND
Study Area Key Intersection
XX(XX) AM(PM) Peak Hour Traffic Volumes
Tuesday, April 20, 2010
4:30-5:30 PM
Wednesday, April 21, 2010
7:30-8:30 AM
BLUE GRAVEL PIT
EXISTING 2010 TRAFFIC VOLUMES
Kimley-Horn
and Associates, Inc.

RIDGEVIEW DATA COLLECTION

6392 Starlight Drive
Morrison, CO 80465

Carbondale, CO

AM Peak
SH 82 and CR 103

File Name : SH 82 CR 103 AM
Site Code : 00000032
Start Date : 4/21/2010
Page No : 1

Groups Printed- Unshifted

	CR 103 Southbound				SH 82 Westbound				Stagecoach Lane Northbound				SH 82 Eastbound				
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07:00 AM	0	0	1	1	0	40	0	40	5	0	3	8	5	222	2	229	278
07:15 AM	2	0	1	3	0	68	1	69	5	0	3	8	3	269	4	276	356
07:30 AM	4	0	1	5	1	78	1	80	2	0	3	5	0	281	3	284	374
07:45 AM	3	0	3	6	1	108	1	110	7	0	1	8	6	252	2	260	384
Total	9	0	6	15	2	294	3	299	19	0	10	29	14	1024	11	1049	1392
08:00 AM	2	0	2	4	1	97	0	98	2	0	2	4	1	256	1	258	364
08:15 AM	0	0	2	2	0	118	3	121	5	1	2	8	0	257	4	261	392
08:30 AM	4	0	2	6	0	113	2	115	4	0	7	11	2	214	5	221	353
08:45 AM	3	0	2	5	1	103	4	108	4	0	6	10	6	195	2	203	326
Total	9	0	8	17	2	431	9	442	15	1	17	33	9	922	12	943	1435
Grand Total	18	0	14	32	4	725	12	741	34	1	27	62	23	1946	23	1992	2827
Apprch %	56.2	0	43.8		0.5	97.8	1.6		54.8	1.6	43.5		1.2	97.7	1.2		
Total %	0.6	0	0.5	1.1	0.1	25.6	0.4	26.2	1.2	0	1	2.2	0.8	68.8	0.8	70.5	

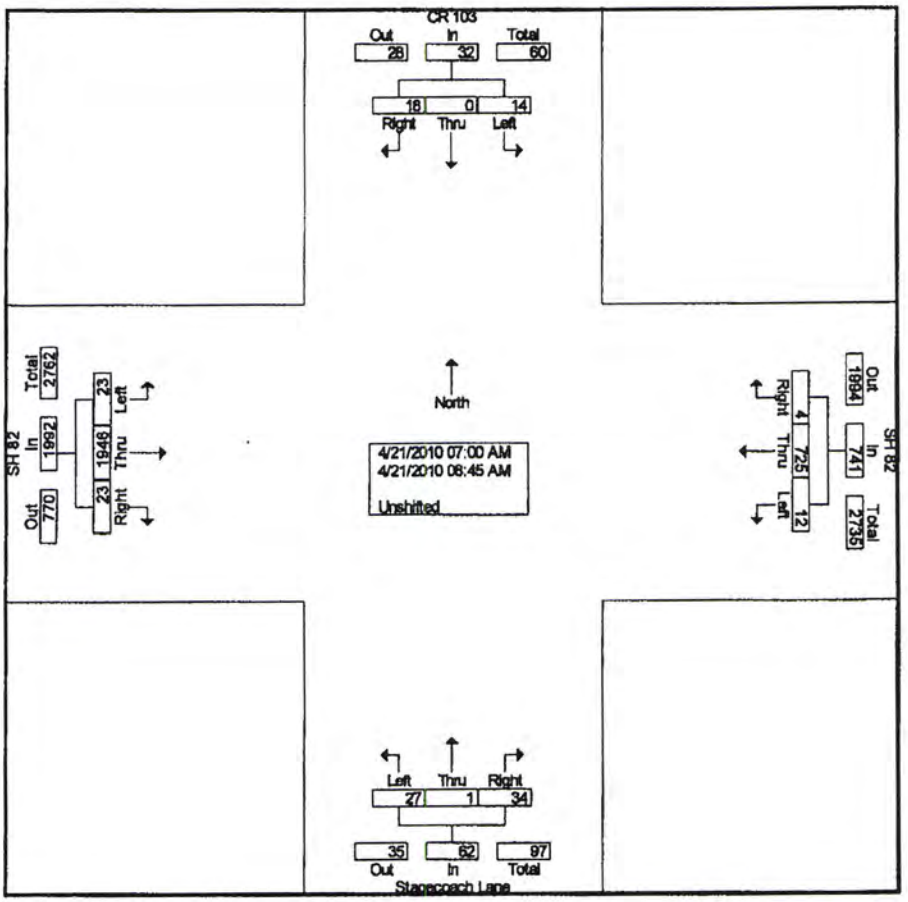
RIDGEVIEW DATA COLLECTION

6392 Starlight Drive
Morrison, CO 80465

Carbondale, CO

AM Peak
SH 82 and CR 103

File Name : SH 82 CR 103 AM
Site Code : 00000032
Start Date : 4/21/2010
Page No : 2



RIDGEVIEW DATA COLLECTION

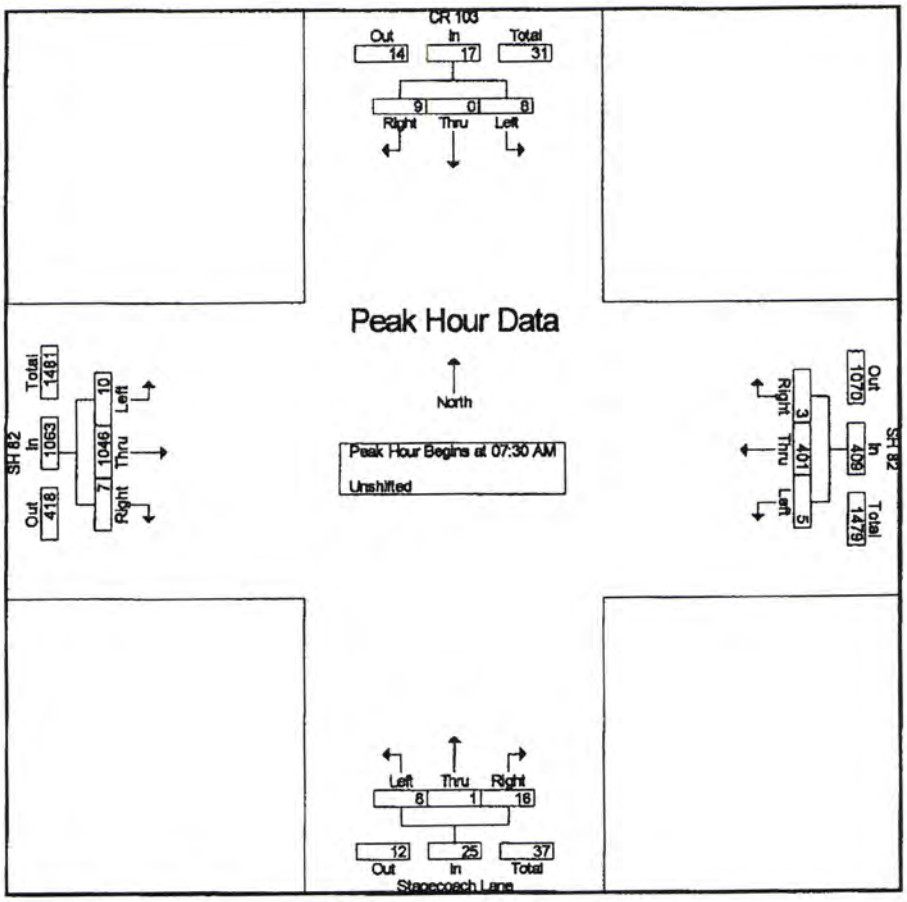
6392 Starlight Drive
Morrison, CO 80465

Carbondale, CO

AM Peak
SH 82 and CR 103

File Name : SH 82 CR 103 AM
Site Code : 00000032
Start Date : 4/21/2010
Page No : 3

	CR 103 Southbound				SH 82 Westbound				Stagecoach Lane Northbound				SH 82 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**4**	0	1	5	**1**	78	1	80	2	0	**3**	5	0	**281**	3	**284**	374
07:45 AM	3	0	**3**	**6**	1	108	1	110	**7**	0	1	**8**	**6**	252	2	260	384
08:00 AM	2	0	2	4	1	97	0	98	2	0	2	4	1	256	1	258	364
08:15 AM	0	0	2	2	0	**118**	**3**	**121**	5	**1**	2	8	0	257	**4**	261	**392**
Total Volume	9	0	8	17	3	401	5	409	16	1	8	25	7	1046	10	1063	1514
% App. Total	52.9	0	47.1		0.7	98	1.2		64	4	32		0.7	98.4	0.9		
PHF	.563	.000	.667	.708	.750	.850	.417	.845	.571	.250	.667	.781	.292	.931	.625	.936	.966



RIDGEVIEW DATA COLLECTION

6392 Starlight Drive
Morrison, CO 80465

Carbondale, CO

PM Peak
SH 82 and CR 103

File Name : SH 82 CR 103 PM
Site Code : 00000032
Start Date : 4/20/2010
Page No : 1

Groups Printed- Unshifted

	CR 103 Southbound				SH 82 Westbound				Stagecoach Lane Northbound				SH 82 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	247	3	250	2	0	5	7	3	108	0	111	368
04:15 PM	0	0	0	0	0	260	4	264	4	0	4	8	5	117	0	122	394
04:30 PM	0	0	0	0	0	270	2	272	4	0	6	10	4	116	0	120	402
04:45 PM	1	0	0	1	1	295	8	304	3	0	0	3	1	99	0	100	408
Total	1	0	0	1	1	1072	17	1090	13	0	15	28	13	440	0	453	1572
05:00 PM	0	0	0	0	0	300	6	306	4	0	3	7	2	110	0	112	425
05:15 PM	0	0	0	0	0	269	4	273	2	0	7	9	2	141	0	143	425
05:30 PM	0	0	0	0	0	265	3	268	2	0	2	4	5	105	1	111	383
05:45 PM	0	0	0	0	0	236	4	240	1	0	2	3	2	112	0	114	357
Total	0	0	0	0	0	1070	17	1087	9	0	14	23	11	468	1	480	1590
Grand Total	1	0	0	1	1	2142	34	2177	22	0	29	51	24	908	1	933	3162
Apprch %	100	0	0		0	98.4	1.6		43.1	0	56.9		2.6	97.3	0.1		
Total %	0	0	0	0	0	67.7	1.1	68.8	0.7	0	0.9	1.6	0.8	28.7	0	29.5	

RIDGEVIEW DATA COLLECTION

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Morrison, CO 80465

Carbondale, CO

PM Peak
SH 82 and CR 103

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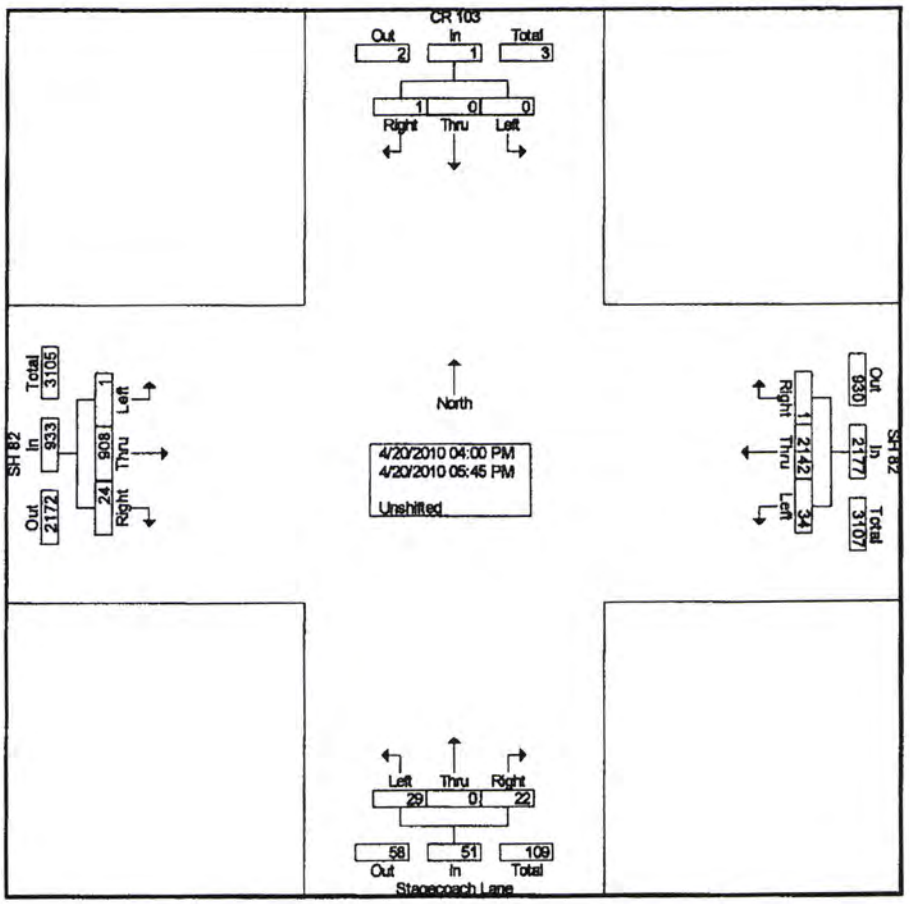

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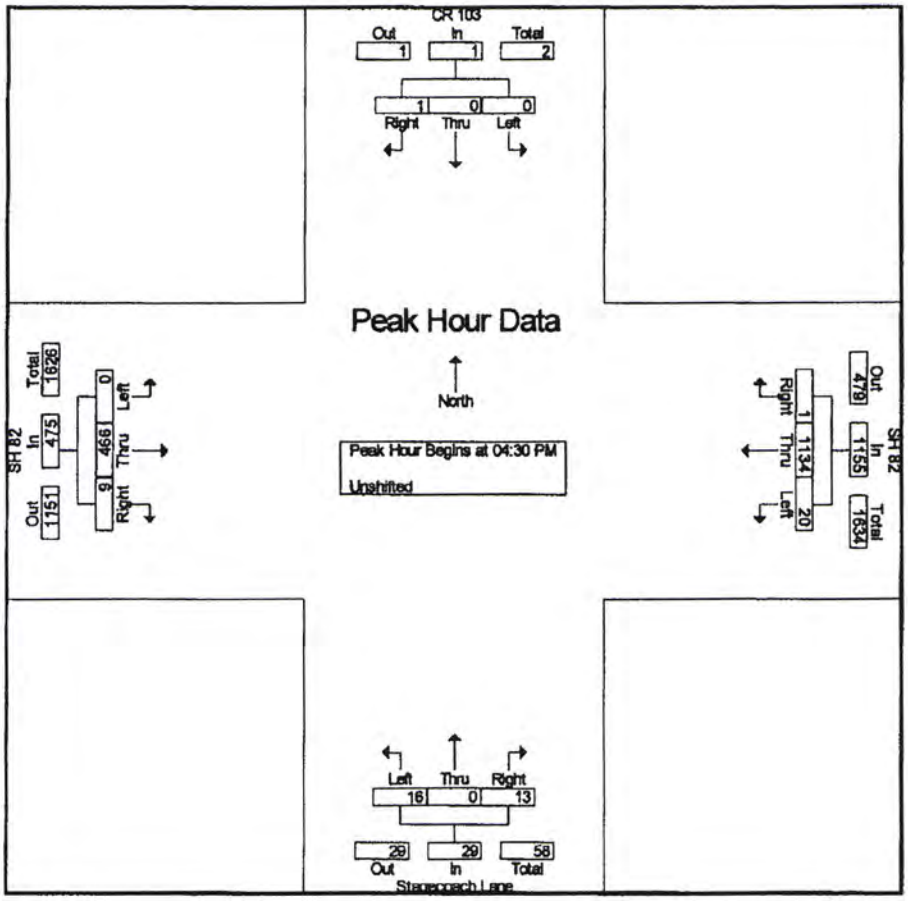
Morrison, CO 80465

Carbondale, CO

PM Peak
SH 82 and CR 103

File Name : SH 82 CR 103 PM
Site Code : 00000032
Start Date : 4/20/2010
Page No : 3

	CR 103 Southbound				SH 82 Westbound				Stagecoach Lane Northbound				SH 82 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	270	2	272	**4**	0	6	**10**	**4**	116	0	120	402
04:45 PM	**1**	0	0	**1**	**1**	295	**8**	304	3	0	0	3	1	99	0	100	408
05:00 PM	0	0	0	0	0	**300**	6	**306**	4	0	3	7	2	110	0	112	**425**
05:15 PM	0	0	0	0	0	269	4	273	2	0	**7**	9	2	**141**	0	**143**	425
Total Volume	1	0	0	1	1	1134	20	1155	13	0	16	29	9	466	0	475	1660
% App. Total	100	0	0		0.1	98.2	1.7		44.8	0	55.2		1.9	98.1	0		
PHF	.250	.000	.000	.250	.250	.945	.625	.944	.813	.000	.571	.725	.563	.826	.000	.830	.976



RIDGEVIEW DATA COLLECTION

6392 Starlight Drive
Morrison, CO 80465

Carbondale, CO

AM Peak
Crystel Springs Rd. and CR 104

File Name : Crystel Springs CR 104 AM
Site Code : 00000032
Start Date : 4/21/2010
Page No : 1

Groups Printed- Unshifted

	Crystel Springs Road Southbound			CR 104 Westbound			Crystel Springs Road Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
07:00 AM	11	1	12	0	2	2	6	4	10	24
07:15 AM	7	0	7	1	0	1	7	2	9	17
07:30 AM	6	0	6	0	3	3	2	5	7	16
07:45 AM	19	0	19	0	2	2	0	3	3	24
Total	43	1	44	1	7	8	15	14	29	81
08:00 AM	16	0	16	0	0	0	0	7	7	23
08:15 AM	12	0	12	0	5	5	1	7	8	25
08:30 AM	9	0	9	1	1	2	1	9	10	21
08:45 AM	6	0	6	0	3	3	2	1	3	12
Total	43	0	43	1	9	10	4	24	28	81
Grand Total	86	1	87	2	16	18	19	38	57	162
Apprch %	98.9	1.1		11.1	88.9		33.3	66.7		
Total %	53.1	0.6	53.7	1.2	9.9	11.1	11.7	23.5	35.2	

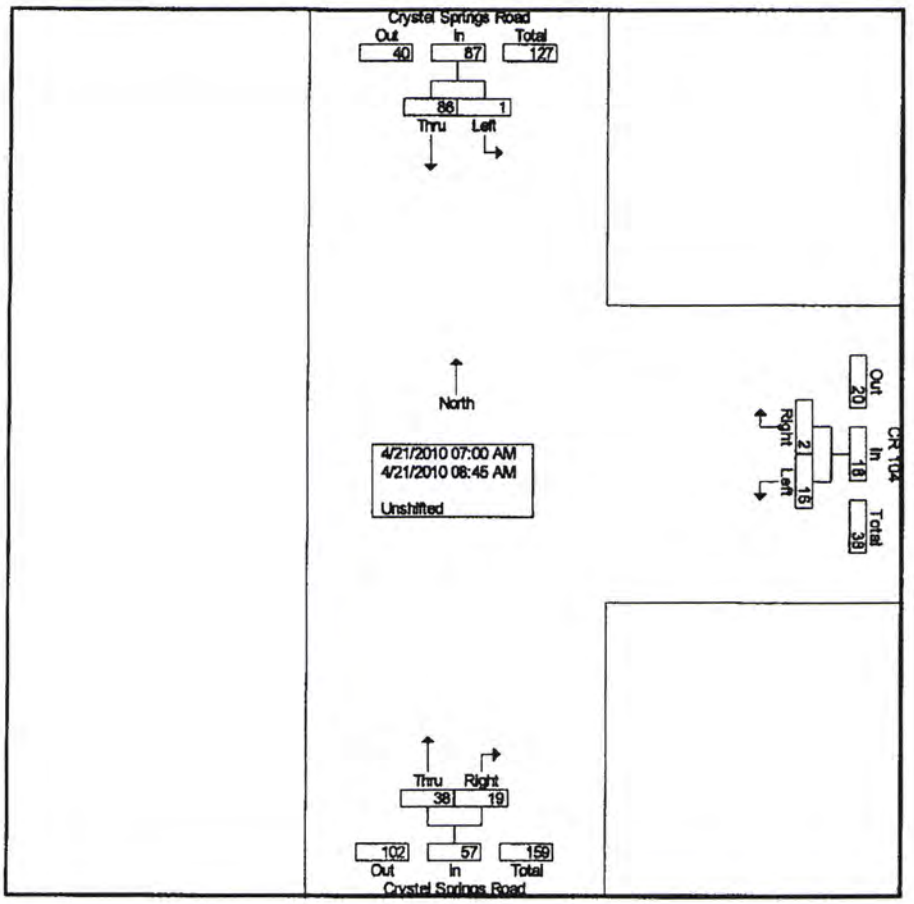
RIDGEVIEW DATA COLLECTION

6392 Starlight Drive
Morrison, CO 80465

Carbondale, CO

AM Peak
Crystel Springs Rd. and CR 104

File Name : Crystel Springs CR 104 AM
Site Code : 00000032
Start Date : 4/21/2010
Page No : 2



RIDGEVIEW DATA COLLECTION

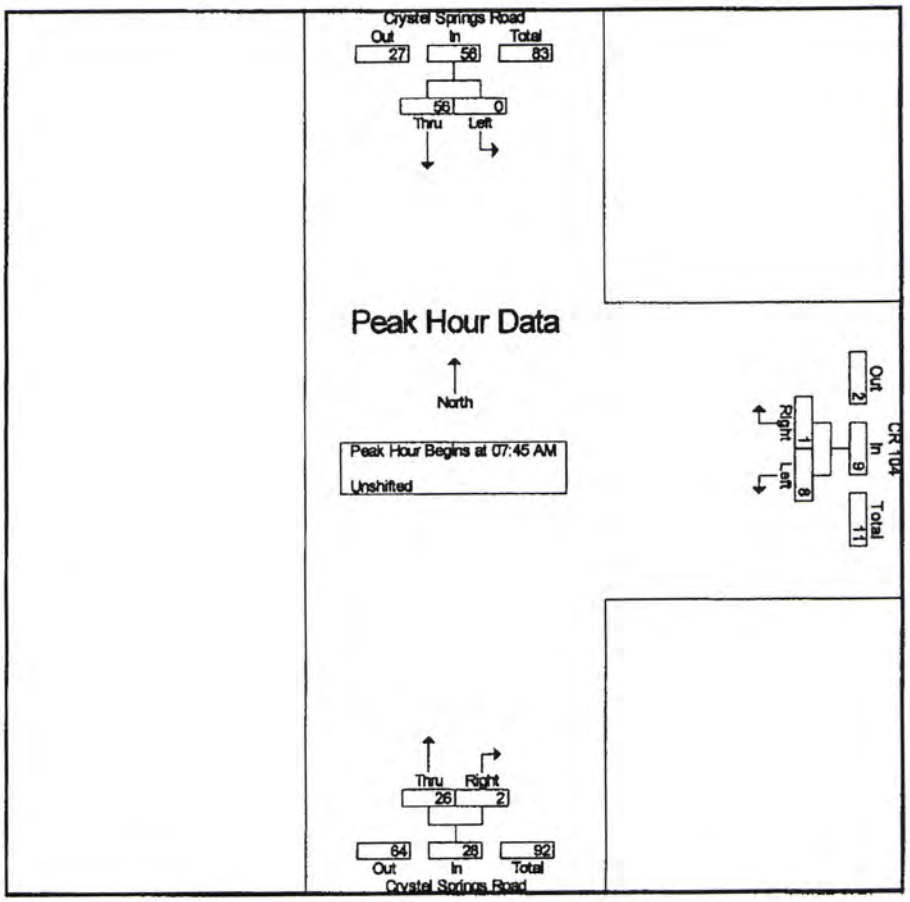
6392 Starlight Drive
Morrison, CO 80465

Carbondale, CO

AM Peak
Crystel Springs Rd. and CR 104

File Name : Crystel Springs CR 104 AM
Site Code : 00000032
Start Date : 4/21/2010
Page No : 3

	Crystel Springs Road Southbound			CR 104 Westbound			Crystel Springs Road Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	**19**	0	**19**	0	2	2	0	3	3	24
08:00 AM	16	0	16	0	0	0	0	7	7	23
08:15 AM	12	0	12	0	**5**	**5**	**1**	7	8	**25**
08:30 AM	9	0	9	**1**	1	2	1	**9**	**10**	21
Total Volume	56	0	56	1	8	9	2	26	28	93
% App. Total	100	0		11.1	88.9		7.1	92.9		
PHF	.737	.000	.737	.250	.400	.450	.500	.722	.700	.930



RIDGEVIEW DATA COLLECTION

6392 Starlight Drive
Morrison, CO 80465

Carbondale, CO

PM Peak
Crystel Springs Rd. and CR 104

File Name : Crystel Springs CR 104 PM
Site Code : 00000032
Start Date : 4/20/2010
Page No : 1

Groups Printed- Unshifted

	Crystel Springs Road Southbound			CR 104 Westbound			Crystel Springs Road Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
04:00 PM	9	0	9	0	2	2	0	13	13	24
04:15 PM	8	0	8	0	2	2	5	10	15	25
04:30 PM	2	0	2	1	4	5	0	11	11	18
04:45 PM	6	0	6	0	2	2	1	16	17	25
Total	25	0	25	1	10	11	6	50	56	92
05:00 PM	14	1	15	0	2	2	1	13	14	31
05:15 PM	11	0	11	0	0	0	2	16	18	29
05:30 PM	5	0	5	0	0	0	4	13	17	22
05:45 PM	8	0	8	0	0	0	0	17	17	25
Total	38	1	39	0	2	2	7	59	66	107
Grand Total	63	1	64	1	12	13	13	109	122	199
Apprch %	98.4	1.6		7.7	92.3		10.7	89.3		
Total %	31.7	0.5	32.2	0.5	6	6.5	6.5	54.8	61.3	

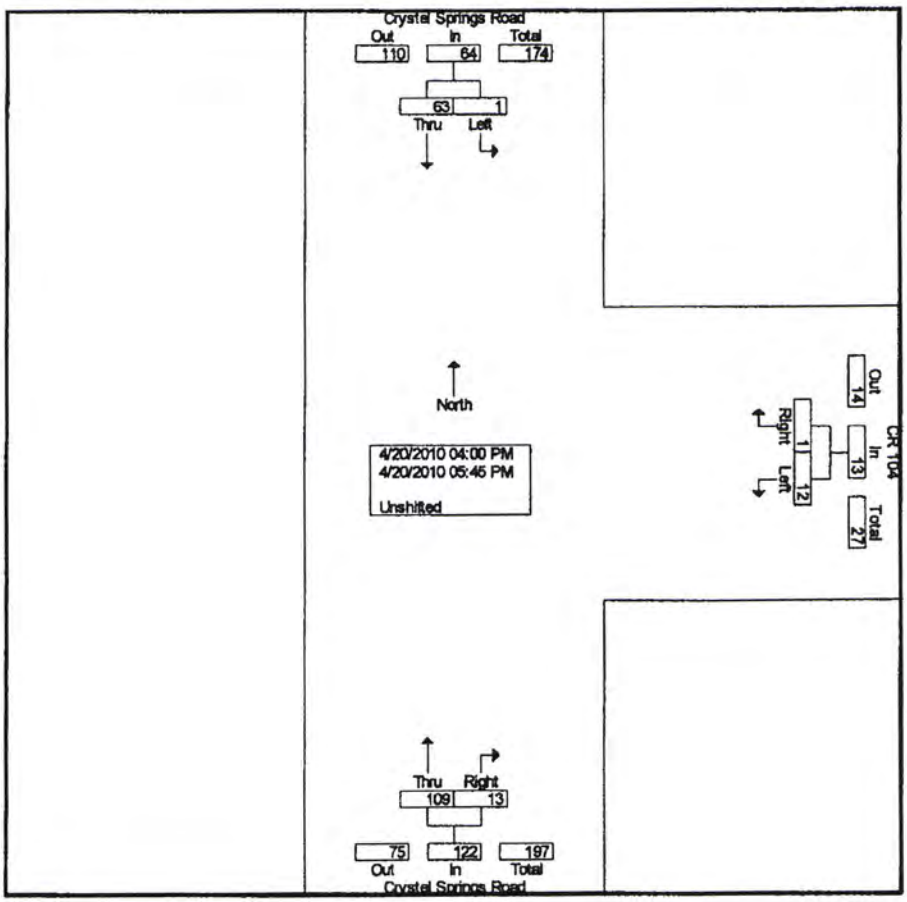
RIDGEVIEW DATA COLLECTION

6392 Starlight Drive
Morrison, CO 80465

Carbondale, CO

PM Peak
Crystel Springs Rd. and CR 104

File Name : Crystel Springs CR 104 PM
Site Code : 00000032
Start Date : 4/20/2010
Page No : 2



RIDGEVIEW DATA COLLECTION

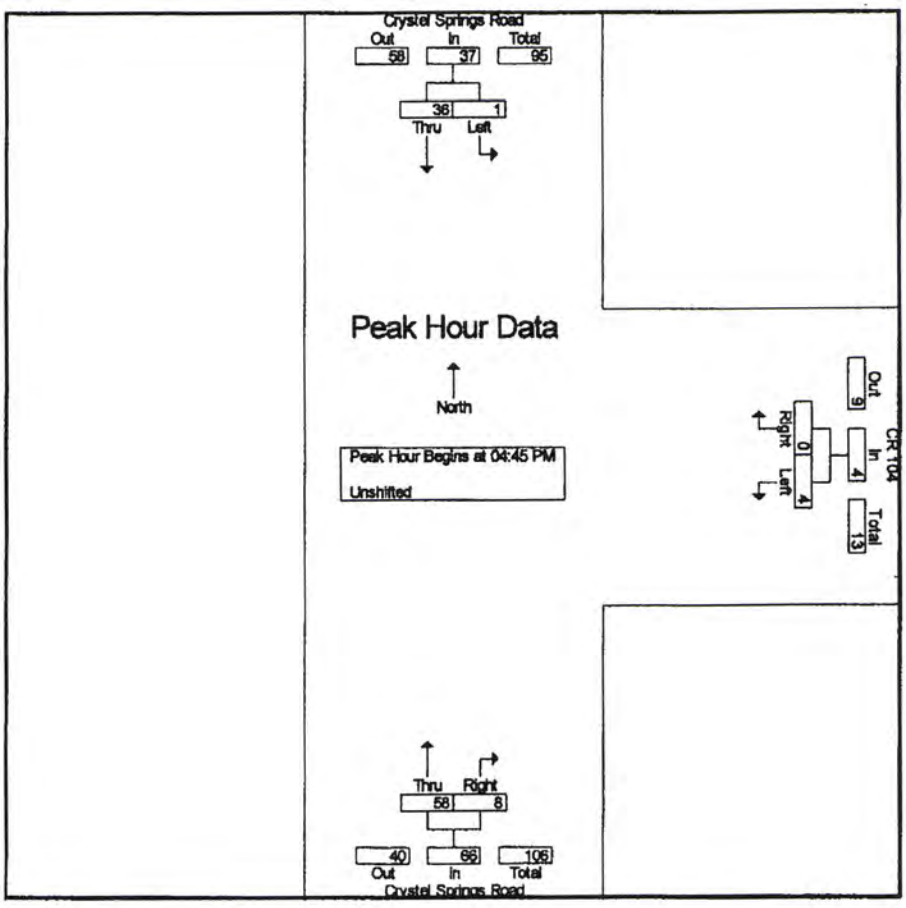
6392 Starlight Drive
Morrison, CO 80465

Carbondale, CO

PM Peak
Crystel Springs Rd. and CR 104

File Name : Crystel Springs CR 104 PM
Site Code : 00000032
Start Date : 4/20/2010
Page No : 3

	Crystel Springs Road Southbound			CR 104 Westbound			Crystel Springs Road Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	6	0	6	0	**2**	**2**	1	**16**	17	25
05:00 PM	**14**	**1**	**15**	0	2	2	1	13	14	**31**
05:15 PM	11	0	11	0	0	0	2	16	**18**	29
05:30 PM	5	0	5	0	0	0	**4**	13	17	22
Total Volume	36	1	37	0	4	4	8	58	66	107
% App. Total	97.3	2.7		0	100		12.1	87.9		
PHF	.643	.250	.617	.000	.500	.500	.500	.906	.917	.863



Western Slope Aggregate, Inc.

April 21, 2010

Curtis Rowe
Kimley-Horn and Associates, Inc.
990 South Broadway, Suite 450
Denver, Colorado 80209

As reviewed with you, the Blue Pit has two existing access points, the first being a private driveway connecting to State Highway 82 (the "82 Access") to the south; the second being a private driveway connecting to County Road 104 to the north. County Road 104 after a fairly short distance then merges into County Road 103 (the "102 Access"). Based upon historical operations, the 82 Access accommodates approximately 95% of all the vehicular traffic generated by the Blue Pit. These locations are set forth within those maps contained within our present Application for Major Impact Use with Garfield County ("Amendment Application").

The 82 Access was permitted by the Colorado Department of Transportation ("CDOT") under Permit No.396055 on March 21, 1996. This permit is attached. The 104 Access is a historical ranch access point.

The CDOT Permit for the 82 Access required the construction of acceleration/deceleration lanes for all 4 movement directions to and from the access, which have been in place since their construction in 1996. Sheets 2 through 6 of the existing permit lists 50 conditions which must be complied with. Almost all of these conditions are details concerning the design and construction of the accel/decel lanes. All of the 50 conditions have been complied with.

The most important conditions are discussed below:

Condition 5: No new property was dedicated for the right of way since the existing right of way was sufficient for the new accel/decel lanes.

Condition 6: The final plat was the same as the pre-existing plat since no new right of way was needed.

Condition 13: Full plans designed by a registered professional engineer at Schmueser Gordon Meyer were provided to CDOT as required and CDOT gave permission to proceed.

Condition 14: Upon completion of the work, the engineer submitted "As Built" plans as required, showing compliance with all requirements.

All other conditions of the installation were met. The access has been in operation since 1996 with no functional problems of any kind.

The CDOT Permit for the 82 Access stipulates that no more than 110 acres of general light industrial use will supply the access point. Over the existing life of the operation as expanded under the Amendment Application, this condition (accessing no more than 110 acres)will always be fully complied with. The pit will not access the additional acreage requested under the Amendment Application for approximately 8 more years, and as this area is accessed later, lands will be reclaimed so that the 110 acres of industrial use is never exceeded. Lewicki and Associates has prepared an analysis showing the disturbance area over the life of the pit, which confirms that the 110 acres will never be exceeded. This analysis is attached.

Current operations consist of one crushing operation and a concrete batch plant. No additional crushers or other operations are planned or requested under the Site Plan contained within the Amendment Application. The pit operations will remain the same for the expanded area. Traffic at both the access points, Highway 82 and 103 Road (approximately 5% of traffic), will not change, due to the pit expansion. Constituting as such merely a life extension of present pit operations, the Amendment Application will result in no additional construction activities and as such, does not put into issue aspects such as staging and storage areas, temporary access points, lane closures or traffic interruptions.

There have never been any issues such as traffic bottlenecks, safety issues or any other issues during the entire time that the 82 Access has been used. Operations will remain the same so the historic traffic from the pit will not change if the Amendment Application is approved.

Sincerely,

M. Sean Mello
Vice President

Greg Lewicki And Associates

11541 Warrington Court
Parker, CO USA 80138

Phone (303) 346-5196 Fax: (303)-346-6934
E-Mail:info@lewicki.biz

April 7, 2010

Curtis Rowe
Kimley-Horn and Associates
990 South Broadway Suite 450
Denver, CO 80209

RE: Blue Pit – Confirmation of Operation Under 110 Acres at all Times Through the Expansion Area

Curtis,
The Blue Pit is presently permitted by Garfield County to mine 82.7 acres. If Western Slope Aggregate is successful in obtaining approval of its present application for Amended Major Impact Review, this area will be expanded to 146.87 acres. As discussed, although the total mineable acreage will be increased, such increase because of contemporaneous reclamation and the use of permitted areas for buffering, the total industrial use area will remain well under 110 acres at any one time. See the scenarios below and attached maps for details.

Current Disturbance 60.4 acres

Permitted Disturbance 82.7 acres (after mining area 2 is mined out) This will not occur for 6-8 more years.

Proposed Disturbance after Mining Area 3 is Mined Out

96.1 acres	Total Disturbance to this Point
– 9.4 acres	South Slope Mining Area 2 Reclaimed to Rangeland
- 4.8 acres	Temporary Wash Plant area Reclaimed to Rangeland
= 81.9 acres	Light Industrial Use

Proposed Disturbance after Mining Area 4 is Mined Out (This is the highest amount of industrial use at any one time for the life of the pit.

118.3 acres	Total Disturbance to this Point
– 9.4 acres	South Slope Mining Area 2 Reclaimed to Rangeland
- 4.8 acres	Temporary Wash plant area Reclaimed to Rangeland
- 12.1 acres	North Slope of Mining Area 3 Reclaimed to Rangeland
- 5.7 acres	Pit Floor in Mining Area 2 Reclaimed to Irrigated Pasture
= 86.3 acres	Light Industrial Use

Proposed Disturbance after Mining Area 5 is Mined Out

136.8 acres	Total Disturbance to this Point
– 9.4 acres	South Slope Mining Area 2 Reclaimed to Rangeland
- 4.8 acres	Temporary Wash plant area Reclaimed to Rangeland
- 12.1 acres	North Slope of Mining Area 3 Reclaimed to Rangeland
- 5.7 acres	Pit Floor in Mining Area 2 Reclaimed to Irrigated Pasture
-12.5 acres	South and West Slope of Mining Area 4 Reclaimed to Rangeland
- 9.2 acres	Pit Floor in Mining Area 4 Reclaimed to Irrigated Pasture
= 83.1 acres	Light Industrial Use

Additionally there will be areas of Mining Area 1 reclaimed to rangeland as area on the pit floor is opened up in the new mining areas for product stockpiling and operations.

If there are any further questions regarding the planned operation, please give me a call.

Thanks for your help

Greg Lewicki

Greg Lewicki P.E.
Greg Lewicki and Associates
(303) 346-5196

DRMS **APPENDIX D**

A Reclamation Permit is active for the existing operation of the Blue Pit. Portions of this permit are included in this appendix. An amendment to this permit will be applied for after the amendment to the land use change permit is approved. The standards that have been agreed upon in the land use change amendment will be incorporated to the DRMS Reclamation Permit.

Colorado Division of Minerals & Geology Report Sorted By Operator 6/8/2010

You requested a report sorted by Operator / Permit Number and based on:	
County:	Garfield
Operator:	Western Slope Aggregates
Permit Number:	All Permit Numbers
Mine Name:	All Mine Names
Permit Status:	Any Permit Status
Commodity:	All Commodities

Resort by County / Operator / Permit Number

Operator Site Name Permit No. Permit Type	Permit Issued Permit Status				Contact Address Line 1 Address Line 2 City State Zip Code		County Permit Acreage Mine Type Annual Fee
QT/QT/QT	Section	Township	Range	Prime Meridian	Telephone	Commodities Mined (USGS Codes)	Required Surety
Western Slope Aggregates Blue Pit M1981207 112c /SW/SE	3/8/1982 AC 25	7S	88W	06	William M Roberts 304 Highway 133 Carbondale CO 81623-0000 (970) 963-9424	SDG	Garfield 82.70 Acres SR $791.00 $307,000.00

Return

Bond for current Blue Pit

NOISE STUDY **APPENDIX E**

edi engineering dynamics incorporated

NOISE ASSESSMENT
BLUE PIT EXPANSION
WESTERN SLOPE AGGREGATES, Inc.
GARFIELD COUNTY, COLORADO

January 2010

Prepared by: Howard N. McGregor

Howard N. McGregor
Registered Professional Engineer
State of Colorado, # 3928

3925 S. Kalamath St., Englewood, Colorado 80110 • voice: 303-761-4367 • fax: 303-761-4379

TABLE OF CONTENTS

3925 S. Kalamath St., Englewood, Colorado 80110 • voice: 303-761-4367 • fax: 303-761-4379

I. INTRODUCTION

This noise assessment report was prepared for Western Slope Aggregates under the direction of Ryan Ellis of Greg Lewicki and Associates and addresses noise emissions and control thereof associated with the proposed expansion of the Blue Pit Sand and Gravel Mine. The pit is located north of State Highway 82 and between County Roads 100 and 103 in Garfield County, Colorado. The address of the Blue Pit is: 0304 Highway 133, Carbondale, Colorado.

The mining plan including drawings and maps necessary for the preparation of this Noise Assessment Report were provided to Engineering Dynamics Inc. by Greg Lewicki and Associates. Other maps and drawings showing equipment locations and access roads have been prepared by Greg Lewicki and Associates and are included in the application package.

Topographical cross sections are included in the Applicant's submittal package.

On Tuesday, April 28, 2009, Mr. McGregor visited the Blue Pit Expansion Area and was given an extensive tour of the site by Mr. D. Brown.

Engineering Dynamics Inc. has prepared noise impact assessment analyses and reports for the surface and underground mining Industry since 1972. All of the work reported herein was performed by Mr. McGregor or under his direct supervision. Howard N. McGregor is a registered professional engineer licensed to practice engineering in the State of Colorado. Mr. McGregor holds Colorado Professional Engineer License Number 3928, which was obtained by examination.

This report will show that the proposed operation can meet State and County noise standards by employing the mitigation measures described in this report.

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II. APPLICABLE LAWS, REGULATIONS, ORDINANCES and LAND ZONING

A. Community Noise

Community noise has been addressed by the Federal Government starting with the U. S. Environmental Protection Agency, (EPA) "Noise Control Act of 1972". In concert with that act, state and local governments have enacted laws or ordinances regulating noise emission levels. Furthermore, these laws clearly define measurement methodology and decibel limits in scientific terms. Some laws do, however, include subjective assessments, which are considered outside of rigorous scientific evaluation and for this reason can be highly variable. Subjective assessments or considerations will not be addressed in this report for that reason.

B. State of Colorado Noise Law

Section 25-12-103. Maximum Permissible Noise Levels

§(1) Every activity to which this article is applicable shall be conducted in a manner so that any noise produced is not objectionable due to intermittence, beat frequency, or shrillness. Sound levels of noise radiating from a property line at a distance of twenty-five feet or more therefrom in excess of the dB(A) established for the following time periods and zones shall constitute prima facie evidence that such noise is a public nuisance:

Maximum Allowable Noise Levels		
Zone	7am to next 7pm	7pm to next 7am
Residential	55 dB(A)	50 dB(A)
Commercial	60 dB(A)	55 dB(A)
Light Industrial	70 dB(A)	65 dB(A)
Industrial	80 dB(A)	75 dB(A)

§(2) In the hours between 7:00am and the next 7:00pm, the noise levels permitted in subsection (1) of this section may be increased by ten dB(A) for a period of not-to-exceed fifteen minutes in any one-hour period. This paragraph in the State of Colorado Noise Law has been interpreted to mean that this 10 dB increase can occur once and only once during the daytime hours of 7:00am to 7:00pm and never during the nighttime hours.

§(3) Periodic, impulsive, or shrill noises shall be considered a public nuisance when such noises are at a sound level of five dB(A) less than those listed in subsection § (1) of this section.

Examples
Periodic – pile drivers, impact wrenches, punch presses, jack hammers and compaction equipment.
Impulsive – firearm, fireworks, blasting, high pressure venting.
Shrill – sirens, metal forming, warning devices.

§(5) Construction projects shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority or, if no time limitation is imposed, for a reasonable period of time for completion of project. This section of the law has been interpreted to include mine development as construction. Such construction would include access roads, top soil removal and storage, set up of stationary equipment such as crushers, screens and engine generators, installation of utilities and construction of earthen noise barrier berms.

Section 25-12-104 Action to Abate

The entire section was amended in 2008 and made effective on August 5, 2008. The last sentence of this section now reads:

The court may stay the effect of any order issued under this section for such time as is reasonably necessary for the defendant to come into compliance with the provisions of this article.

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C. Garfield County

Garfield County has no ordinance or regulation addressing noise in general and relies upon Colorado Revised Statutes, Title 25, Article 12,"Noise Abatement" for determination of compliance. However, Garfield County has a supplemental Gravel Extraction Regulation and Section 5.17.03 titled "Noise/Vibration" addresses noise and vibration. This Garfield County Regulation resolves conflicts that have occurred previously into the interpretation of CRS 25-12 section 103 as to whether the noise limits are determined by the zoning of the noise emitter property or the zoning of the receiver property. The Garfield County Regulation clearly states in 5.17.03 § (2) that the noise limits are determined by the zoning of the receiver property.

The Garfield County Supplemental Gravel Extraction Regulation and the Colorado Noise Law are silent on another factor which is the setting of the sound level meter used during the measurement of the noise. Most sound level meters have two settings available when using the A-weighting; the settings are dB(A) fast and dB(A) slow. The dB(A) fast setting always indicates a dB(A) value that is equal to or greater than the dB(A) slow setting. The difference can be as great as 10 dB(A) for non-steady noise sources such as a dozer or front-end loader.

For the stationary equipment such as crushers, vibratory screens and conveyors, there is essentially no difference between the dB(A) fast and the dB(A) slow because the noise is constant or steady. However, the dB(A) values used in the analysis section of this report (Section IV) are the maximum, either measured or provided by the equipment manufacturer. They are not the average decibel value, which could include minimum noise levels.

D. Zoning of Adjacent Land

1. North

A residence is located 868 ft. north of the boundary of Mining Areas 3 and 4 just north of the "Y" intersection of County Road 103. The residence is at an elevation of 6180 ft. and due south at the pit boundary the elevation is 6158 ft. There are two residences north of Mining Area 5; one is at a distance of 880 ft. and at an elevation of 6180 ft. The second residence is at a distance of 712 ft. and at an elevation of 6175 ft. All three residences are north of the irrigation ditch/pipe. There is a 50 ft. offset to the south from the edge of the permit boundary to the mining excavation.

2. South

Residential property is located to the south and across Hwy 82. The distance to the nearest residential property from the Expansion Area is about 430 ft. and the distance from the mining limit boundary is 480 ft. The residential property is lower than the mining limit boundary by about 80 ft. therefore the line-of-sight between these two locations is broken. This is shown as cross section A-A' in the drawing titled "Western Slope Aggregates, Blue Pit, Visual Map 2, Cross-Section Map.

3. East

Due east of the existing mine and the mine Expansion Area is the Garfield County Waste Disposal Area. This parcel of land has not fully been reclaimed and in all probability will never be rezoned to residential. It could be rezoned to industrial. Additionally there is an enormous topsoil stockpile on the eastern portion of Mining Area 1 that will remain in place until the mine nears its final reclamation stage.

4. West

There are residential and farming structures located 850 ft. northwest from the northwest corner of the Mining Area 5. In this northwesterly direction, there are at the present time no significant natural changes in elevation or other natural obstructions that would be barriers or obstructions to noise coming from the mine. There may be, however, during mine development and production noise barriers made of overburden or mine product.

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III. EQUIPMENT INVENTORY AND NOISE EMISSION LEVELS

Table 1 presents a list of the equipment that will be in operation at the pit during development, mining and reclamation. The noise emission levels for the equipment listed in Table 1 is presented as so many dB(A) at 100 ft. This avoids the confusion associated with the use of the sound power level dB. The 100 ft. dB value can be used to determine the noise level at other distances by use of a simple calculation using logarithms. However, the calculation does not include the effects of terrain, vegetation, vertical thermal gradients in the atmosphere and wind and should be used only for initial analysis purposes.

Table 1
Mine Site Construction and Development

Description	Qty	Mfg. I.D.	Equipment Usage	dB(A) @ 100 ft.
Backhoes	2	Hatchi 450	Overburden Removal and Construction and Pit Development	74
Dozer(1)	1	CAT D-IO	Mining of Material Distribution of Overburden during Reclamation Sand and Gravel Excavation	81
Front-End Loader	2	CAT 988	Overburden Removal-Sand and Gravel Excavation Loading Crusher Bin loading Haul Trucks for On-Site Transportation	76
Front-End Loader	2	CAT 980	Overburden Removal-Sand and Gravel Excavation Loading Crusher Bin loading Haul Trucks for On-Site Transportation	76
Skid Steer	1	CAT-246	Area Clean up	71
Jaw Crusher	1	Cedarapids 2248	Primary Crushing	74
Cone Crusher	1	JPI-JCI	Secondary Crushing	71
Vibratory Screens	1	Cedarapids	Separating of Rock Sizes	70
Conveyors	3	---	Stockpiling	65
Wash Plant	1		Production	66of at the receptor
Water Truck	1	4,000 Gal	Dust Control	63
Mine Site Haul Trucks(2)	3	CAT 730 30 ton	Transport of Material to Crusher Area Moving Crushed Products to Stock Piles	76
Backup Alarm		BRS107	White Noise Backup Alarm	68
Highway Haul Truck(3)	---	Misc.	Transport of Product to Market 15 mph speed limit on site	66
Concrete Plant	1			

(1) The Caterpillar Model D-10 has the highest noise emission of the D series dozers.
(2) Measurements taken by E. D. I. at the Cripple Creek and Victor Gold Mine on 2/3/04.
(3) When on public roads the noise limit for trucks in excess of 6000 pounds gross weight is 86 dB(A) at 50 ft. or 80 dB(A) at 100 ft. per CRS 25-12.
Field measurements of haul truck noise were taken by Engineering Dynamics Inc. on July 17, 2007 at truck speeds of 15 mph, EDI Job No. C3610.

3925 S. Kalamath St., Englewood, Colorado 80110 • voice: 303-761-4367 • fax: 303-761-4379

IV. ANALYSIS

A. Approach

The noise assessment analysis presented in this section of the report is based upon the following two requirements.

1. During development (construction) of the amended pit area the daytime noise limits shall not exceed the maximum allowable for Industrial Zoning of 80 dB(A) at a distance of 25 ft. beyond the Blue Pit Expansion property line in all directions CRS 25-12-103, §(5).
2. During production in the expansion area, the noise limits shall not exceed the maximum allowable for Residential Zoning of 55 dB(A) during the daytime and 50 dB(A) during the nighttime at a distance of 25 ft. beyond the pit property line or at the receptor, CRS 25-12-103.

B. Mine Development

During mine development, which is considered a construction activity, the noise limits are as detailed in CRS 25-12-103§ (5), which limits the maximum permissible noise levels specified for industrial zones, that is: 80 dB(A) form 7:00am to 7:00pm.

Mine development will begin in already worked Area 1 then sequentially onto Areas 2, 3, 4 and 5. Overburden, which ranges from 4 to 7 ft. in depth, will be removed with the front end loader. The maximum noise level to the north, south, east and west that will occur when there is a direct line-of-sight and when the front end loader is at the closest property line are presented in Table 2.

Table 2
Maximum Noise Level during Mine Development
Front End Loader – 76 dB(A) at 100 ft.

Direction	Receptor	Noise Source Location	Maximum Noise Level – dB(A)
N	Home	North Edge of Areas 3 and 5	57
N	Home	North Edge of Areas 3 and 5	57
N/NW	Home	Northwest Corner of Area 5	59
S	Homes	Directly South of Areas 2 and 4	62
E	Property Line	Eastern Property Line	66
W	Property Line	Western Property Line	70

It can be seen in Table 2 that under the worst case conditions when the front end loader is at the western mining edge and close to the property line that the noise level is 10 dB(A) less than the 80 dB(A) permissible level specified in CRS 25-12-103 § (5). This noise level occurs only at the western mine boundary. In all other directions the noise levels are much lower. Also, the duration of these noise levels will only be several days.

C. Initial Mining

After mine development is completed and production commences the noise limits shall not exceed the maximum allowable for Residential Zoning at a distance of 25 ft. beyond the Blue Pit property line or at the receptor.

Excavation of material will start at the east face of the initial expansion area and the raw material will be transported to the jaw crusher bin by the front end loaders. During initial production the crushing and screening plant will remain at its present location and will always be below grade. The 55 dB(A) noise contour or footprint will not extend beyond the top edge of the mine face to the north, south, east and west. Elevations may be seen on the Site Plan.

3925 S. Kalamath St., Englewood, Colorado 80110 • voice: 303-761-4367 • fax: 303-761-4379

D. Processing Plant – Noise Emissions

The processing plant works as follows:
The front-end loader (CAT988) will dump the raw rock material into the jaw crusher feed bin. The crushed rock and fines will then feed to vibratory screens located under the jaw crusher.
Rock of the selected size will be washed and go via conveyor to storage piles. Rock that is too large will be transported via conveyor to the cone crusher where the material is reduced in size. From the cone crusher, the material goes back to the vibratory screens, where it is separated by size, washed and then conveyed to storage piles.

The processing plant will initially remain at its present location and then move in a westerly direction but remain at the same level as the existing pit floor, which is 6110 ft.

Table 3 presents the stationary and mobile equipment that make up the processing plant and the noise level of each. At distances greater than 100 ft., the processing plant can be mathematically treated as a single noise source having the total noise emission of 80 dB(A) at 100 ft. as presented in Table 3.

Table 3
Processing Plant Noise Emission

Description	Manufacturer I.D.[1]	dB(A) @ 100 ft.
Front-End Loader	CAT988	76
Jaw Crusher	Cedarapids	74
Cone Crusher	JCI	71
Conveyors	Misc.	65
Vibratory Screen	---	70
Total Combined Noise Level		80

(1) See Table 1, which details all of the equipment operating at the pit.

If the processing plant and the receptors (north, south, east, west) were all at the grade level or in the direct line-of-sight, the 55 dB(A) noise level would occur at a distance of 1775 ft. in all directions. The reduction of noise from the processing plant due to distance and the barrier effect of the intervening terrain are presented in Table 4.

Table 4
Processing Plant Elevation – 6110 ft.

Direction	Receptor	Receptor Height	Terrain Height	Distance Pit to Receptor	Distance[1] Reduction	Terrain Reduction	Receptor Noise Level-dB(A)
N	Home	6180	6158	2800	28	6	46
N	Home	6180	6158	3400	30	6	44
N/NW	Home	6175	6158	4200	32	5	43
S	Homes	6110	6240	1400	23	22	35
E	Property Line	6270	6270	1400[2]	24	20	36
W	Property Line	6180	6180	3300[2]	30	5	45

(1) Reduction to the noise level of 80 dB(A) occurring at 100 ft.
(2) Pit property line

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It should be pointed out that the terrain reductions occur when the receptor is beyond the upper edge of the pit and the line-of-sight from the receptor to the processing plant is broken. Otherwise, there is no reduction in the noise from the plant at that receptor location due to the pit wall. Also, the data presented in Table 4 are when all of the equipment is in operation including the front end loader. Such a situation would not be continuous because, for example, the front end loader would be away from the crusher bin when it was scooping up another load of rock.

E. Mine Site Haul Trucks

Mine site haul trucks are high capacity units capable of hauling up to 30 ton loads. The trucks will transport material to storage areas near the processing plant where the front end loader will pick up the material and dump it into the jaw crusher bin. The trucks will also be used to transport over burden to storage areas. The mine site haul trucks will be limited in speed to 15 mph or less and will produce 76 dB(A) at 100 ft. and 55 dB(A) at an unobstructed distance of about 1000 ft. The only time this condition would occur is when the trucks were transporting overburden to storages areas during development of the Expansion Area during which time the 80 dB(A) permissible noise level, CRS 25-12-103 §(5), would occur at distances of less than 100 ft. During mine production the trucks will initially start out at about 10 ft. below grade and the 55 dB(A) distance would be at 700 ft. As mining progressed the trucks will be further below grade and the distance to the 55 dB(A) will become less and less and eventually be pulled in to the pit edge.

F. Highway Haul Trucks

Highway haul trucks will be loaded with rock products or concrete and leave the pit via the access road and onto Highway 82. Once the trucks are on Highway 82, they will be required to not exceed the permissible noise limits of CRS 25-12-106 of 86 dB(A) at 50 ft. at speeds of less than 35 mph. Customer haul trucks that exceed the 86 dB(A) may be denied access to the pit until they have been repaired.

There is a change in Crs-25-12-107 that is effective, July 1, 2010 and is as follows:

(1) Counties or municipalities may adopt resolutions or ordinances prohibiting the operation of motor vehicles within their respective jurisdictions that produce noise in excess of the sound levels in decibels, measured on the "A" scale on a standard sound level meter having characteristics established by the American National Standards Institute, publication S1.4 – 1971, and measured at a distance of fifty feet from the center of the line of travel and within the speed limits specified in this section.

This change removes the requirement that this section is applicable to of highway vehicles such as those within the Blue Pit Expansion areas. However, Garfield County can still enact noise limits for highway haul trucks that are less than those in CRS-25-12, for example; haul trucks on Highway 82.

G. Reclamation

Topsoil may be taken from the topsoil storage areas to the mined area using the dozer, front end loader and haul truck. Distribution of the topsoil will be done with the front end loaders. Smaller equipment such as a skid steer may be used for ditching and seeding. Most of the time during reclamation, the equipment will be below grade.

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V. CONCLUSIONS AND RECOMMENDATIONS

1. Noise emissions during mine development (construction as defined in CRS 25-12-103 § (5) will not exceed 80 dB(A) at 25 ft. beyond the existing or amended pit boundary.

2. During mine development noise emission levels from the front end loader at the homes to the north and south will be less than 62 dB(A) when the front end loader is at grade level and at the closest property line. At all other locations that do not abut to the mining boundary the noise level during development will be less than 60 dB(A).

3. During mine production in any of the five mining area, the noise level from mobile equipment occurring at the homes to the north, northwest and south will be less than 55 dB(A) and intermittently lower. This condition will only occur during the initial mining operations, as mining progresses and the mobile equipment goes deeper and deeper, the noise level will decrease.

4. Noise levels from the processing plant will always be less than 46 dB(A) at the homes to the north, northwest and south. The process plant will always be at an elevation of 6110 ft (the pit floor), even when it is moved in an easterly direction.

5. All backup alarms will be of the white noise type and will be adjusted during installation to meet all regulatory requirements.

6. Customer haul trucks that exceed the noise limits specified in CRS 25-12-107 may be denied access to the pit until they have been maintained and are in compliance.

7. Noise measurements will be taken once the pit expansion area of the pit is in production to verify compliance with CRS 25-12-103. Measurement results will be detailed in a report certified by a Professional Acoustical Engineer registered in the State of Colorado.

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AIR EMISSION PERMITS **APPENDIX F**

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150

CONSTRUCTION PERMIT

PERMIT NO: 07GA0560

DATE ISSUED: MAY 14 2009 FINAL APPROVAL

ISSUED TO: **Western Slope Aggregate, Inc.**

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Aggregate processing plant cone crusher, located at 14682 Highway 82, Carbondale, Garfield County, Colorado.

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

One (1) **JCI,** model : 14LSPM, serial number: PO60351 crusher, design rated at 250 tons per hour. Particulate matter shall be controlled with *water spray bars*

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

1. Visible emissions from processing equipment and transfer points shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. Opacity shall be measured by EPA Method 9. (Reference: Regulation 1, Section II.A.1.& 4.)

2. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Reg. 3, Part B, III.E.) (State only enforceable)

3. Emissions of point-source air pollutants shall not exceed the following limitations (as calculated in the Division's preliminary analysis): (Reference: Regulation 3, Part B, II.A.4).

Particulate Matter (TSP):	**1.3** *tons per year*
Particulate Matter<10 µm (PM_{10}):	**0.6** tons per year.

4 Emissions of **fugitive** air pollutants shall not exceed the following limitations (as calculated in the Division's preliminary analysis): (Reference: Regulation 3, Part B, II.A.4).

Fugitive Particulate Matter (TSP).	**0.10** tons per year
Fugitive Particulate Matter<10 µm (PM_{10}):	**0.05** tons per year.

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5. This source shall be limited to a maximum production rate as listed below and all other activities, operational rates and numbers of equipment as stated in the application. Compliance with the production rate listed below shall be demonstrated by maintaining annual records of the actual production rate, or by maintaining annual records of the actual hours of operation, and then multiplying the annual hours of operation by the design rate (in tons per hour) of the equipment. Annual records of either the actual production rate or actual hours of operation shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4)

   Aggregate crushing shall not exceed **500,000** tons per year.

6. Spray bars shall be used if material moisture content is insufficient to control particulate emissions.

7. A revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Reg.3, Part A,II.C)

   a. Annually whenever a significant increase in emissions occurs as follows:

      For any criteria pollutant:

      For sources emitting less than 100 tons per year, a change in actual emissions of five tons per year or more, above the level reported on the last APEN; or

   b. Whenever there is a change in the owner or operator of any facility, process, or activity; or

   c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or

   d. Whenever a permit limitation must be modified; or

   e. No later than 30 days before the existing APEN expires.

8. This source is subject to the New Source Performance Standards requirements of Regulation No. 6, Part A, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, including, but not limited to, the following:

   a. Visible emissions from crushers shall not exceed fifteen percent (15%) opacity.

   b. Visible emissions from screens and each transfer point shall not exceed ten percent (10%) opacity.

   In addition, the following requirements of Regulation No. 6, Part A, Subpart A, General Provisions, apply.

   a. At all times, including periods of start-up, shutdown, and malfunction, the facility and control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether or not acceptable operating and maintenance procedures are being used will be based on information available to the Division, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (Reference: Regulation 6, Part A. General Provisions from 40CFR60.11)

   b. No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a

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standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (§ 60.12)

c. Written notification of construction and initial startup dates shall be submitted to the Division as required under § 60.7.

d. Records of startups, shutdowns, and malfunctions shall be maintained, as required under § 60.7.

e. Written notification of opacity observation or monitor demonstrations shall be submitted to the Division as required under § 60.7.

f. Compliance with opacity standards shall be demonstrated according to § 60.11.

9. Permit 07PO0061 is canceled with the issuance of this permit.

By: _____
Dennis M. Myers, P.E.
Permit Engineer

By: _____
R K Hancock III, P.E.
Unit Leader

Permit History:

Permit 07GA0560 – Final Approval – This issuance. Cancels permit 07PO0061.
Permit 07PO0061 - Initial Approval – Issued on April 12, 2007. This permit is canceled with the issuance of permit 07GA0560.

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Notes to permit holder:

1. The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedance of any specific emission control regulation or any ambient air quality standard. A revised air pollution emission notice (APEN) and application form must be submitted with a request for a permit revision.

2. This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: http://www.cdphe.state.co.us/regulations/airregs/100102aqcccommonprovisionsreg.pdf.

3. The emission levels contained in this permit are based on the following uncontrolled emission factors (any change in operations may change these factors):

   Crushers:

Particulate Matter:	0.0050 pounds per ton of aggregate processed
Particulate Matter<10 µm (PM_{10}):	0.0024 pounds per ton of aggregate processed
Fugitive Particulate Matter:	0.0004 pounds per ton of aggregate processed
Fugitive Particulate Matter<10 µm (PM_{10}):	0.0002 pounds per ton of aggregate processed

   (76.0% control applies for water spray bars.)

4. This source is classified as a: Minor source.

Western Slope Aggregate, Inc.

Permit No. 07GA0560
FINAL APPROVAL

GENERAL TERMS AND CONDITIONS: (IMPORTANT! READ ITEMS 5,6,7 AND 8)

1. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

2. Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the APCD to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.

3. Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of, a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to final approval by the Air Pollution Control Division (APCD) on grounds set forth in the Colorado Air Quality Control Act and regulations of the Air Quality Control Commission (AQCC), including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.

4. This permit and any required attachments must be retained and made available for inspection upon request at the location set forth herein. With respect to a portable source that is moved to a new location, a copy of the Relocation Notice (required by law to be submitted to the APCD whenever a portable source is relocated) should be attached to this permit. The permit may be reissued to a new owner by the APCD as provided in AQCC Regulation No. 3, Part B, Section II.B. upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.

5. Issuance (initial approval) of an emission permit does not provide "final" authority for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. If the APCD so determines, it will provide written documentation of such final approval, which does constitute "final" authority to operate. ***Compliance with the permit conditions must be demonstrated within 180 days after commencement of operation.***

6. **THIS PERMIT AUTOMATICALLY EXPIRES IF** you (1) do not commence construction or operation within 18 months after either the date of issuance of this permit or the date on which such construction or activity was scheduled to commence as set forth in the permit, whichever is later; (2) discontinue construction for a period of 18 months or more; or (3) do not complete construction within a reasonable time of the estimated completion date Extensions of the expiration date may be granted by the APCD upon a showing of good cause by the permittee prior to the expiration date

7. **YOU MUST notify the APCD no later than thirty days after commencement of the permitted operation or activity by submitting a Notice of Startup (NOS) form to the APCD**. The Notice of Startup (NOS) form may be downloaded online at www.cdphe.state.co.us/ap/downloadforms.html. Failure to do so is a violation of AQCC Regulation No. 3, Part B, Section III.G.1., and can result in the revocation of the permit. *You must demonstrate compliance with the permit conditions within 180 days after commencement of operation as stated in condition 5.*

8. Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollution Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate

9 Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150

CONSTRUCTION PERMIT

PERMIT NO: 07GA0559

FINAL APPROVAL

DATE ISSUED: MAY 14 2009

ISSUED TO: **Western Slope Aggregate, Inc.**

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Aggregate processing plant crusher, located at 14682 Highway 82, Carbondale, Garfield County, Colorado.

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

One (1) Cedar Rapids, model: JC2248, serial number: 53938 crusher, design rated at 350 tons per hour. Particulate matter shall be controlled with *water spray bars*

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

1. Visible emissions from processing equipment and transfer points shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. Opacity shall be measured by EPA Method 9. (Reference. Regulation 1, Section II.A.1.& 4.)

2. The permit number shall be marked on the subject equipment for ease of identification. (Reference Reg. 3, Part B, III E.) (State only enforceable)

3. Emissions of point-source air pollutants shall not exceed the following limitations (as calculated in the Division's preliminary analysis): (Reference: Regulation 3, Part B, II.A.4).

Particulate Matter (TSP):	**1.8** tons per year
Particulate Matter<10 µm (PM_{10}):	**0.8** tons per year.

4. Emissions of **fugitive** air pollutants shall not exceed the following limitations (as calculated in the Division's preliminary analysis): (Reference: Regulation 3, Part B, II.A.4).

Fugitive Particulate Matter (TSP):	**0.13** tons per year
Fugitive Particulate Matter<10 µm (PM_{10}):	**0.06** tons per year.

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5. This source shall be limited to a maximum production rate as listed below and all other activities, operational rates and numbers of equipment as stated in the application. Compliance with the production rate listed below shall be demonstrated by maintaining annual records of the actual production rate, or by maintaining annual records of the actual hours of operation, and then multiplying the annual hours of operation by the design rate (in tons per hour) of the equipment. Annual records of either the actual production rate or actual hours of operation shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4)

   Aggregate crushing shall not exceed **650,000** tons per year.

6. Spray bars shall be used if material moisture content is insufficient to control particulate emissions.

7. A revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Reg.3, Part A,II.C)

   a. Annually whenever a significant increase in emissions occurs as follows:

      For any criteria pollutant:

      For sources emitting less than 100 tons per year, a change in actual emissions of five tons per year or more, above the level reported on the last APEN; or

   b. Whenever there is a change in the owner or operator of any facility, process, or activity; or

   c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or

   d. Whenever a permit limitation must be modified; or

   e. No later than 30 days before the existing APEN expires.

8. This source is subject to the New Source Performance Standards requirements of Regulation No. 6, Part A, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, including, but not limited to, the following:

   a. Visible emissions from crushers shall not exceed fifteen percent (15%) opacity.

   b. Visible emissions from screens and each transfer point shall not exceed ten percent (10%) opacity.

   In addition, the following requirements of Regulation No. 6, Part A, Subpart A, General Provisions, apply.

   a. At all times, including periods of start-up, shutdown, and malfunction, the facility and control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether or not acceptable operating and maintenance procedures are being used will be based on information available to the Division, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (Reference: Regulation 6, Part A. General Provisions from 40CFR60.11)

   b. No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (§ 60.12)

Western Slope Aggregate, Inc.
Permit No. 07GA0559
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c Written notification of construction and initial startup dates shall be submitted to the Division as required under § 60.7.

d. Records of startups, shutdowns, and malfunctions shall be maintained, as required under § 60.7.

e. Written notification of opacity observation or monitor demonstrations shall be submitted to the *Division as required under § 60.7.*

f. Compliance with opacity standards shall be demonstrated according to § 60.11.

9. Permit 07PO0060 is canceled with the issuance of this permit.

By: _____
Dennis M. Myers, P.E.
Permit Engineer

By: _____
R K Hancock III, P.E.
Unit Leader

Permit History:

Permit 07GA0559 – Final Approval – This issuance. Throughput (and associated emissions) corrected from 500,000 tons per year to 650,000 tons per year. Cancels permit 07PO0060.
Permit 07PO0060 – Initial Approval – Issued on April 12, 2007. This permit is canceled with the issuance of permit 07GA0559.

Western Slope Aggregate, Inc.
Permit No. 07GA0559
FINAL APPROVAL

Notes to permit holder:

1. The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedance of any specific emission control regulation or any ambient air quality standard. A revised air pollution emission notice (APEN) and application form must be submitted with a request for a permit revision.

2. This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: http://www.cdphe.state.co.us/regulations/airregs/100102aqcccommonprovisionsreg.pdf.

3. The emission levels contained in this permit are based on the following uncontrolled emission factors (any change in operations may change these factors):

   Crushers:

Particulate Matter:	0.0050 pounds per ton of aggregate processed
Particulate Matter<10 µm (PM_{10}):	0.0024 pounds per ton of aggregate processed
Fugitive Particulate Matter:	0.0004 pounds per ton of aggregate processed
Fugitive Particulate Matter<10 µm (PM_{10}):	0.0002 pounds per ton of aggregate processed

4. This source is classified as a: Minor source.

Western Slope Aggregate, Inc.

Permit No. 07GA0559
FINAL APPROVAL

GENERAL TERMS AND CONDITIONS: (IMPORTANT! READ ITEMS 5,6,7 AND 8)

1. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

2. Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the APCD to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.

3. Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of, a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to final approval by the Air Pollution Control Division (APCD) on grounds set forth in the Colorado Air Quality Control Act and regulations of the Air Quality Control Commission (AQCC), including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.

4. This permit and any required attachments must be retained and made available for inspection upon request at the location set forth herein. With respect to a portable source that is moved to a new location, a copy of the Relocation Notice (required by law to be submitted to the APCD whenever a portable source is relocated) should be attached to this permit. The permit may be reissued to a new owner by the APCD as provided in AQCC Regulation No. 3, Part B, Section II.B. upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.

5. Issuance (initial approval) of an emission permit does not provide "final" authority for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. If the APCD so determines, it will provide written documentation of such final approval, which does constitute "final" authority to operate. ***Compliance with the permit conditions must be demonstrated within 180 days after commencement of operation.***

6. **THIS PERMIT AUTOMATICALLY EXPIRES IF** you (1) do not commence construction or operation within 18 months after either the date of issuance of this permit or the date on which such construction or activity was scheduled to commence as set forth in the permit, whichever is later; (2) discontinue construction for a period of 18 months or more; or (3) do not complete construction within a reasonable time of the estimated completion date. Extensions of the expiration date may be granted by the APCD upon a showing of good cause by the permittee prior to the expiration date.

7. **YOU MUST notify the APCD no later than thirty days after commencement of the permitted operation or activity by submitting a Notice of Startup (NOS) form to the APCD**. The Notice of Startup (NOS) form may be downloaded online at www.cdphe.state.co.us/ap/downloadforms.html. Failure to do so is a violation of AQCC Regulation No. 3, Part B, Section III.G.1., and can result in the revocation of the permit. *You must demonstrate compliance with the permit conditions within 180 days after commencement of operation as stated in condition 5.*

8. Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollution Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.

9. Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

STATE OF COLORADO

EPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150

CONSTRUCTION PERMIT

PERMIT NO: **07GA0330**

FINAL APPROVAL

DATE ISSUED:

ISSUED TO: Western Slope Aggregate, Inc.

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Aggregate processing plant screen, located at 14682 Highway 82, Carbondale, Garfield County, Colorado.

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

One (1) Cedar Rapids, model: 6X20, serial number: P6203322 screen, design rated at 250 tons per hour. Particulate matter shall be controlled with water spray bars.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

1. Visible emissions from processing equipment and transfer points shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. Opacity shall be measured by EPA Method 9. (Reference: Regulation 1, Section II.A.1.& 4.)

2. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Reg. 3, Part B, III.E.) (State only enforceable)

3. Emissions of point-source air pollutants shall not exceed the following limitations (as calculated in the Division's preliminary analysis): (Reference: Regulation 3, Part B, II.A.4)

Particulate Matter (TSP):	**0.4** tons per year
Particulate Matter<10 µm (PM_{10}):	**0.2** tons per year.

4. This source shall be limited to a maximum production rate as listed below and all other activities, operational rates and numbers of equipment as stated in the application. Compliance with the production rate listed below shall be demonstrated by maintaining annual records of the actual production rate, or by maintaining annual records of the actual hours of operation, and then multiplying the annual hours of operation by the design rate (in tons per hour) of the equipment. Annual records of either the actual production rate or actual hours of operation shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II A.4)

   Screening of aggregate shall not exceed **500,000** tons per year.

5. Spray bars shall be used if material moisture content is insufficient to control particulate emissions

6. A revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Reg.3, Part A,II.C)

Western Slope Aggregate, Inc.

Permit No. 07GA0330
Final Approval

a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting less than 100 tons per year, a change in actual emissions of five tons per year or more, above the level reported on the last APEN; or

b. Whenever there is a change in the owner or operator of any facility, process, or activity; or

c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or

d. Whenever a permit limitation must be modified; or

e. No later than 30 days before the existing APEN expires.

7. This source is subject to the New Source Performance Standards requirements of Regulation No. 6, Part A, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, *when used at a site with initial crushing capacity of greater than 150 tons per hour (portable sources) or 25 tons per hour (fixed sources)* including, but not limited to, the following:

a. Visible emissions from screens and each transfer point shall not exceed ten percent (10%) opacity.

In addition, the following requirements of Regulation No. 6, Part A, Subpart A, General Provisions, apply.

a. At all times, including periods of start-up, shutdown, and malfunction, the facility and control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether or not acceptable operating and maintenance procedures are being used will be based on information available to the Division, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (Reference: Regulation 6, Part A. General Provisions from 40CFR60.11)

b. No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (§ 60.12)

c. Written notification of construction and initial startup dates shall be submitted to the Division as required under § 60.7.

d. Records of startups, shutdowns, and malfunctions shall be maintained, as required under § 60.7.

e. Written notification of opacity observation or monitor demonstrations shall be submitted to the Division as required under § 60.7.

f. Compliance with opacity standards shall be demonstrated according to § 60.11.

8. Permit 07PO0059 is canceled with the issuance of this permit.

Western Slope Aggregate, Inc.

Permit No. 07GA0330
Final Approval

By: _____
Dennis M. Myers, P.E.
Permit Engineer

By: _____
R K Hancock III, P.E.
Unit Leader

Permit History:

Permit 07GA0330 – Final Approval – This issuance. Cancels permit 07PO0059.

Permit 07PO0059 - Initial Approval - Issued on April 12, 2007. This permit is canceled with the issuance of permit 07GA0330.

Notes to permit holder:

1. The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedance of any specific emission control regulation or any ambient air quality standard. A revised air pollution emission notice (APEN) and application form must be submitted with a request for a permit revision.

2. This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: http://www.cdphe.state.co.us/regulations/airregs/100102aqcccommonprovisionsreg.pdf.

3. The emission levels contained in this permit are based on the following uncontrolled emission factors (any change in operations may change these factors):

Screens:	
Particulate Matter:	0.001764 pounds per ton of aggregate processed
Particulate Matter<10 µm (PM_{10}):	0.000840 pounds per ton of aggregate processed

4. This source is classified as a: Minor source

Western Slope Aggregate, Inc.

Permit No. 07GA0330
Final Approval

GENERAL TERMS AND CONDITIONS: (IMPORTANT! READ ITEMS 5,6,7 AND 8)

1. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

2. Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the APCD to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.

3. Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of, a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to final approval by the Air Pollution Control Division (APCD) on grounds set forth in the Colorado Air Quality Control Act and regulations of the Air Quality Control Commission (AQCC), including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.

4. This permit and any required attachments must be retained and made available for inspection upon request at the location set forth herein. With respect to a portable source that is moved to a new location, a copy of the Relocation Notice (required by law to be submitted to the APCD whenever a portable source is relocated) should be attached to this permit. The permit may be reissued to a new owner by the APCD as provided in AQCC Regulation No. 3, Part B, Section II.B. upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.

5. Issuance (initial approval) of an emission permit does not provide "final" authority for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. If the APCD so determines, it will provide written documentation of such final approval, which does constitute "final" authority to operate. ***Compliance with the permit conditions must be demonstrated within 180 days after commencement of operation.***

6. **THIS PERMIT AUTOMATICALLY EXPIRES** IF you (1) do not commence construction or operation within 18 months after either the date of issuance of this permit or the date on which such construction or activity was scheduled to commence as set forth in the permit, whichever is later; (2) discontinue construction for a period of 18 months or more; or (3) do not complete construction within a reasonable time of the estimated completion date. Extensions of the expiration date may be granted by the APCD upon a showing of good cause by the permittee prior to the expiration date.

7. **YOU MUST notify the APCD no later than thirty days after commencement of the permitted operation or activity by submitting a Notice of Startup (NOS) form to the APCD**. The Notice of Startup (NOS) form may be downloaded online at www.cdphe.state.co.us/ap/downloadforms.html. Failure to do so is a violation of AQCC Regulation No. 3, Part B, Section III.G.1., and can result in the revocation of the permit. *You must demonstrate compliance with the permit conditions within 180 days after commencement of operation as stated in condition 5.*

8. Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollution Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.

9. Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

VISUAL IMPACT REPORT

APPENDIX G

WILDLIFE IMPACT REPORT **APPENDIX H**

Western Slope Aggregate

Blue Pit Visual Impact Report
Garfield County, Colorado

December 2009

Greg Lewicki And Associates, PLLC
11541 Warrington Court Phone: (303) 346 5196 Fax (303)-346-6934
Parker, CO USA 80138 E-Mail: info@lewicki.biz

Blue Pit Visual Impact Report
Table of Contents

Introduction

The Blue Pit is located approximately 2.5 miles east of Carbondale, CO on Highway 82. The Blue Pit is separated from the Roaring Fork River Valley by an 80' tall natural slope which remains after removing the gravel from an elevated alluvial terrace. Western Slope Aggregate has a lease with the landowner which allows them to conduct mining operations north of this slope. The gravel deposit which is being mined was deposited by the Roaring Fork River and is greater than 100 feet thick. The groundwater level limits the mining of the deposit at approximately 90 feet deep in the expansion area and 60 feet in current permit area. The groundwater surface is estimated from the existing excavation and by exploration drilling conducted in the area.

The site has been mined since 1981 under the state Reclamation Permit # M-1981-207. The site has been mined the site the early 1980's and has expanded to an annual production rate of approximately 400,000 tons per year. The existing permit area is 82.70 acres and approximately 25 acres is still able to be mined until the expansion area is entered. Approximately 60 acres of additional gravel mining is included in the expansion area. The existing reserves will be exhausted in less than 8 years and Western Slope Aggregate wants to secure reserves further into the future. The expansion area is located directly adjacent to the existing operation and is shown the Site Map located in this Visual Impact Report.

Since Western Slope Aggregate has operated the Blue Pit, there have been no major complaints or violations pertaining to the visual impact of the mining operation. Western Slope Aggregate realizes that there are visual impacts associated with the expansion of the Blue Pit, especially to the homeowners north of the pit. Through the mitigation measures outlined in this report, mining of the expansion area will minimize visual impact and provide an excellent reclamation plan for the final site.

Visual Map 1 shows the site in relation to the surrounding area. Features of the surrounding area are shown. It also shows key picture locations discussed in this report.

Mining Plan

Map C-1 shows the current status of the site where considerable mining has taken place under the approved permit. The map also shows the extent of the mining approved in the existing permit, which is now divided into 5 phases. Mining Area 1 is the current permitted area east of the Basin Ditch, Mining Area 2 is the previously permitted but west of the Basin Ditch. The current approved plan allows 2:1 final slopes in all areas. Mining Areas 3, 4 and 5 are proposed areas of new mining under the 2009 expansion plan. All of these areas can be seen on Map C-2: Mine Plan Map.

Minimization of visual impact to the homes north of the pit is the driving force of the entire plan sequencing. The plan is to continue moving west at the southern edge of the mining limit, while performing most activities from the pit bottom, making most of the activities invisible. This includes the actual mining with a dozer, loading of the raw gravel with a front end loader and trucking the gravel to the plant facilities in Mining Area 1.

As mining moves to Mining Area 2, the pit bottom will likely be lowered from an existing depth of approximately 60 feet to 90 feet. This is entirely based on what is believed to be the level of groundwater in the area, which is the limiting factor in the pit depth, since the operation cannot expose groundwater. The southern face of Mining Area 2 will be mined at a slope of 1.5:1 and the visible portion of this slope will be temporarily reclaimed as the pit is lowered. In this way, the homes to the north will primarily see a reclaimed slope on the south of the pit. Once the pit reaches its final depth, the operation will move north, always working from the pit bottom. As this is done, the length of temporary vegetated slope will be expanded. As the pit bottom extends north, the south slope will be gradually restored to a 3:1 slope, using overburden, processing fines and imported fill. The actual slope will be approximately 3.1:1, since flat drainage benches will be installed on the slope to prevent later erosion. Visual Map 2 shows a cross section depicting all the items discussed above.

During the extension of mining to the north, topsoil and overburden will be stripped on the original surface, in advance of the mining operation. This will be visible, but it will be done in rectangular fashion, to look similar to a plowed field, which is done from time to time on the existing irrigated field. This topsoil and overburden stripping will take place approximately one week per year.

Reclamation Plan Basics

The reclamation plan is based on the following main items:

1) Keeping the concrete plant operation in the existing east area of the pit. This plant is not visible to any of the homeowners north of the pit, since it is at the pit bottom and east of the homeowners view.
2) Reclaiming Mining Area 1 sideslopes to rangeland, at a 2.5H:1V slope.
3) Restoring irrigation to the flat bottom portion of the expansion area of the site
4) Reclaiming Mining Areas 2, 3, 4 and 5 sideslopes to rangeland, using the newly proposed slopes of 3:1. A justification of these slopes being steeper than 5:1 is given in the Section 7-840 Gravel Extraction Regulations - Section H of the 2009 expansion plan application.
5) Maintaining the Basin Ditch and Spring Ditch through the property.
6) Keep the mine operation and most reclamation activities well below the visible sight line of the homes to the north by utilizing the depth of the deposit and the mine sequencing to minimize the visual impacts.
7) All reclamation activities will be done in phases so that the visual impact to the north homes is minimized.
8) The north facing slopes of the pit will be temporarily reclaimed and irrigated to lessen visual impacts to the homes to the north.

Evaluation of Visual Impacts

On November 4 of 2009, several pictures were taken from various areas surrounding the Blue Pit to determine the areas that would have a visual impact due to the operations of the Blue Pit. These areas were broken down into three major areas: 1) Highway 82, 2) the Roaring Fork River Valley and 3) the homes north of the pit. Locations of the pictures included in this report are shown on Visual Map 1 - General Location Map which is included in this report. Visual representations of the expansion areas have been created using a baseline topographic map in AutoCad, which was then modified using 3D grids for the mining and reclamation of the expansion area. These visual representations were made to determine the impacts from the three sensitive areas.

Sensitive Area #1 - Highway 82

Highway 82 is a heavily traveled road by Garfield residents, commercial vehicles as well as tourists. As seen on the General Location Map, this area needs to be evaluated for visual impacts due to the expansion of the Blue Pit. The view to the north (looking towards the Blue Pit) is shown in the next three pictures. The undisturbed southern face of the natural slope is approximately 50-90 feet high, which is vegetated with mature trees and grasses. There is no part of the expansion area (or the existing operation) that is visible from Highway 82.

The access road is the only visible part of the operation and will be kept in its existing condition as well as truck traffic. The locations of all pictures used in this report are shown on the General Location Map in this Visual Impact report. All pictures were taken on November 2, 2009 by Greg Lewicki, P.E. with a Canon G10 digital camera using the equivalent of a human eye view zoom level.

Picture 1 – Highway 82 looking north at the natural slope, which will never be disturbed. All mining operations take place further north and cannot be seen from anywhere along Highway 82.

Picture 2 – From Highway 82 looking at the site access road. No improvements are needed at this access. All operation activities will take place far beyond the upper edge of the terrace shown in the picture.

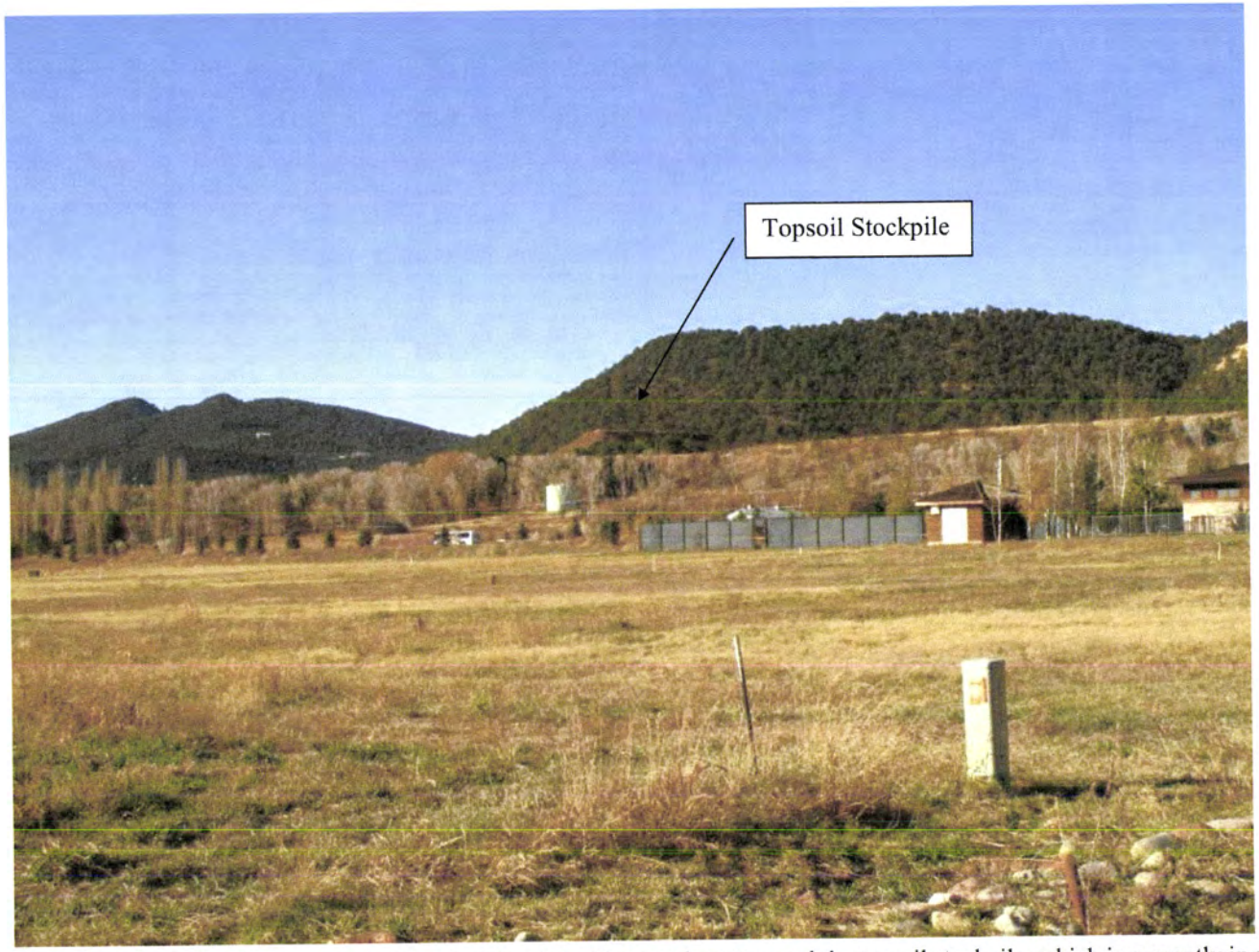
Sensitive Area #2 - The Roaring Fork River Valley

The Roaring Fork River Valley does not have a visual impact from the expansion area since the expansion area is not visible from the valley floor. Since the mining area is basically an excavation of the upper gravel terrace, and the outside portion (on the south) of this terrace will be left intact, the operation cannot be seen from the valley. The only part of the existing operation that is visible from the valley is the topsoil stockpile at the far eastern edge of the permit area. This existing stockpile, shown on Picture 5, will be vegetated for most of the entire life of the operation. It will be used to reclaim the site after mining and backfilling activities have been completed at the end of the mine life.

As stated before the berm left on the southern side of the pit provides a barrier to the operation. Also areas on the southern side of the valley that are elevated similarly to the Blue Pit are industrial and can not see the operation because it occurs behind the berm and below the natural grade. The river valley is also heavily vegetated with mature cottonwood trees as shown in the following pictures.

Picture 3 – Ranch south of the Blue Pit and south of the Roaring Fork River looking north to the pit. The cottonwoods and pines block the terrace from view.

Picture 4 – View from the Storage Buildings on the south side of the river valley looking north to the gravel terrace. The operation is more than one mile to the north of this location. The terrace is slightly visible but the operation cannot be seen due to its depth below the existing terrace.



Picture 5 – View from the meadow southeast of the pit looking northeast toward the topsoil stockpile, which is currently in place and is visible. This is the most-impacted view from any location south of the pit. Once the topsoil stockpile is vegetated, it will also be less noticeable.

Sensitive Area #3 - Homes North of the Pit

Approximately one dozen homes were constructed on a hill to the north of the Blue Pit expansion area and have a direct view of the expansion area. The visual impacts will be minimized through the use of the natural terrain, phasing the operation, contemporaneous reclamation and the use of temporary seeding as well as final reclamation seeding.

The natural terrain of the area of the Blue Pit is a relatively flat terrace elevated approximately 50-90 feet above the valley floor and Highway 82. This flat terrace extends further to the north for approximately 200-700 feet, where some ranch buildings are located. These buildings are owned by the property owner of the pit. The homes are located on a hill further to the north overlooking the pit. These homes vary in elevation but are approximately 100 to 300 feet higher than the elevation of the gravel terrace. The homes are also located at a distance of approximately 2000 to 3000 feet north of the terrace to be mined.

Picture 6 shows some of the activities on the western portion of the existing disturbance. Many gravel stockpiles and the wash plant are visible. As described in the mine plan, the pit floor will move west from Mining Area 1 and much of the existing disturbance will move to the pit floor, where it will be invisible. This will actually be an improvement over what is now visible. For an initial period of approximately 3 years the wash plant will be located north of Mining Area 1 in the existing horse pasture. The wash plant will be moved to the pit floor once ample room is available.

Several pictures were taken from the road leading to theses homes north of the planned expansion area. The worst case visual scenarios are shown in Pictures 6 and 7, where the gravel terrace is visible, representing the view from the homes. Picture 7 location represents the worst case visual location since it the highest point where homes are located while at the same time, the operation is visible. The access road continues north but the terrain levels out and thick stands of trees prevent the homes from seeing anything below. Western Slope Aggregate understands the view from the homes is very attractive, with Mount Sopris in the background. Modified versions of these pictures have been included to show what the site will look due to mining. Picture 6 – Zoomed In View is an intermediate stage looking east of the farm road splitting the property. Picture 6 Normal Eye View shows the same area as currently exists but at a normal human eye view. Picture 6 –Normal Eye View Modified shows the effects of mining this area. This picture is crucial because mining activity will be taking place at pit level but it is not visible due to the depth and the angles involved. Visual Map 2 shows this in the Cross Section. Picture 7 is from a different location on the road, which shows the majority of the expansion area to the west. Picture 7 -Modified shows the effects of mining this area. The line of site angle is fairly shallow which prevents the homeowners from seeing the pit floor when mining is taking place. During topsoil and overburden salvage operations, the equipment will be at the same grade as the existing fields and the equipment will be visible. Topsoil and overburden salvage will only occur approximately one week per year and will therefore not have a significant visual impact. Also, the topsoil and overburden operation will be performed in rectangular form, which is very similar to the way that the current irrigated fields are managed for the irrigated alfalfa. These

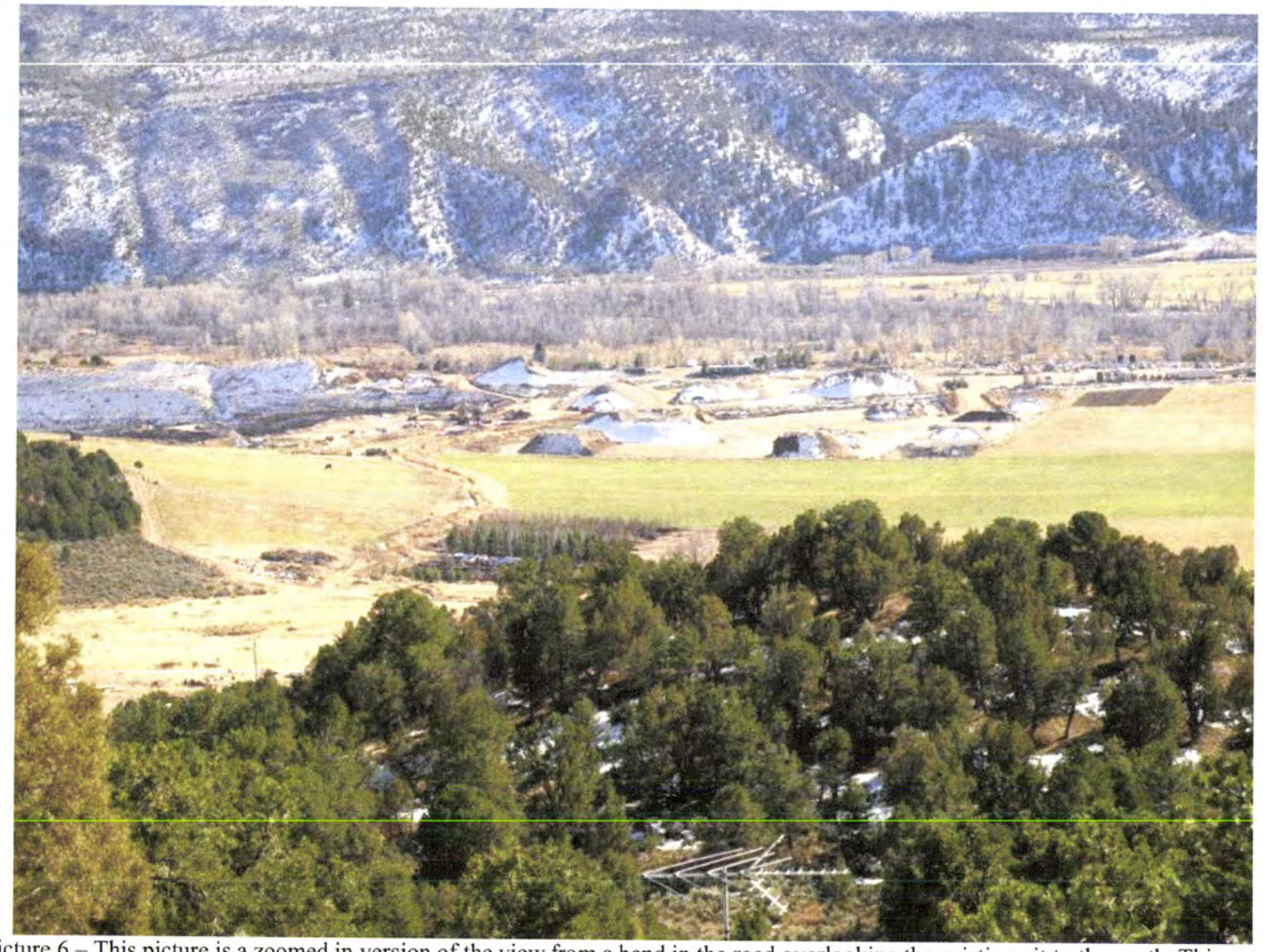
fields are disked at intervals to relieve soil compaction. The natural terrain and site angle are shown in the Visual Map 2 - Cross Section which is included in this section.

The expansion area will be phased to limit the total disturbed area at any one time. The processing will be conducted within the existing operation. The expansion area will salvage topsoil and overburden each year to minimize the amount of area disturbed at any one time. The phases are also oriented so that the longest distance is in the east west direction to help shield the pit from the homes.

The external slopes of the expansion area will be mined to 1.5H:1V and will therefore need to be backfilled prior to final reclamation seeding. As areas are fully mined out, the external slopes will be backfilled with overburden or imported fill material to a final reclamation slope of no steeper than 3H:1V.

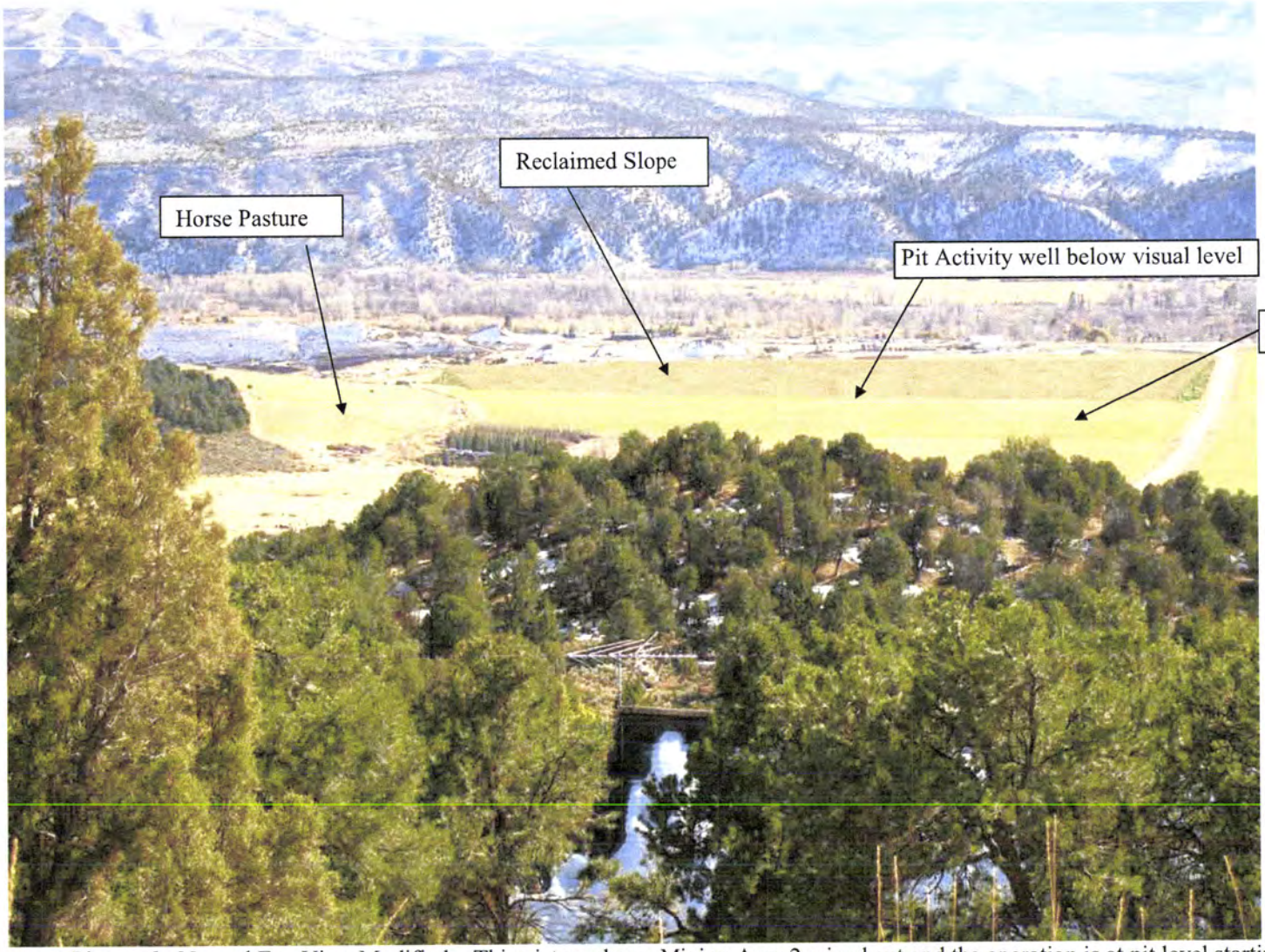
Temporary seeding will be conducted on the 1.5H:1V slopes that are visible from the homes north of the Pit. Theses slopes will be seeded in the fall with a seed mix that is designed for the Carbondale climate and which will provide good visual cover. This temporary reclamation will be irrigated in a supplemental fashion to ensure that it provides the visual protection for the homes to the north. This will be accomplished with a water truck spraying the slope to supplement natural precipitation. Theses slopes should be of similar color and texture of the irrigated pasture adjacent to the expansion area. Subsequent phases will not be disturbed until the temporary ground cover is established on the slope that will become visible. See the Visual Map 2 - Cross Section for details of the seeding schedule.

As described in the mine plan, as the operation progresses north, the south slope can be backfilled to its final slope and will be reclaimed using the final rangeland seed mix. As bottom areas are mined, graded and topsoiled, these areas will also be reclaimed on an ongoing basis. The final seed mixes will be placed on all final graded and topsoiled areas. The slopes will be seeded with a rangeland mix that will replicate the native slopes that have not been irrigated. The flat bottom will be irrigated and will be seeded with the same seed mix that the landowner uses on the existing irrigated pastures. This is primarily alfalfa.



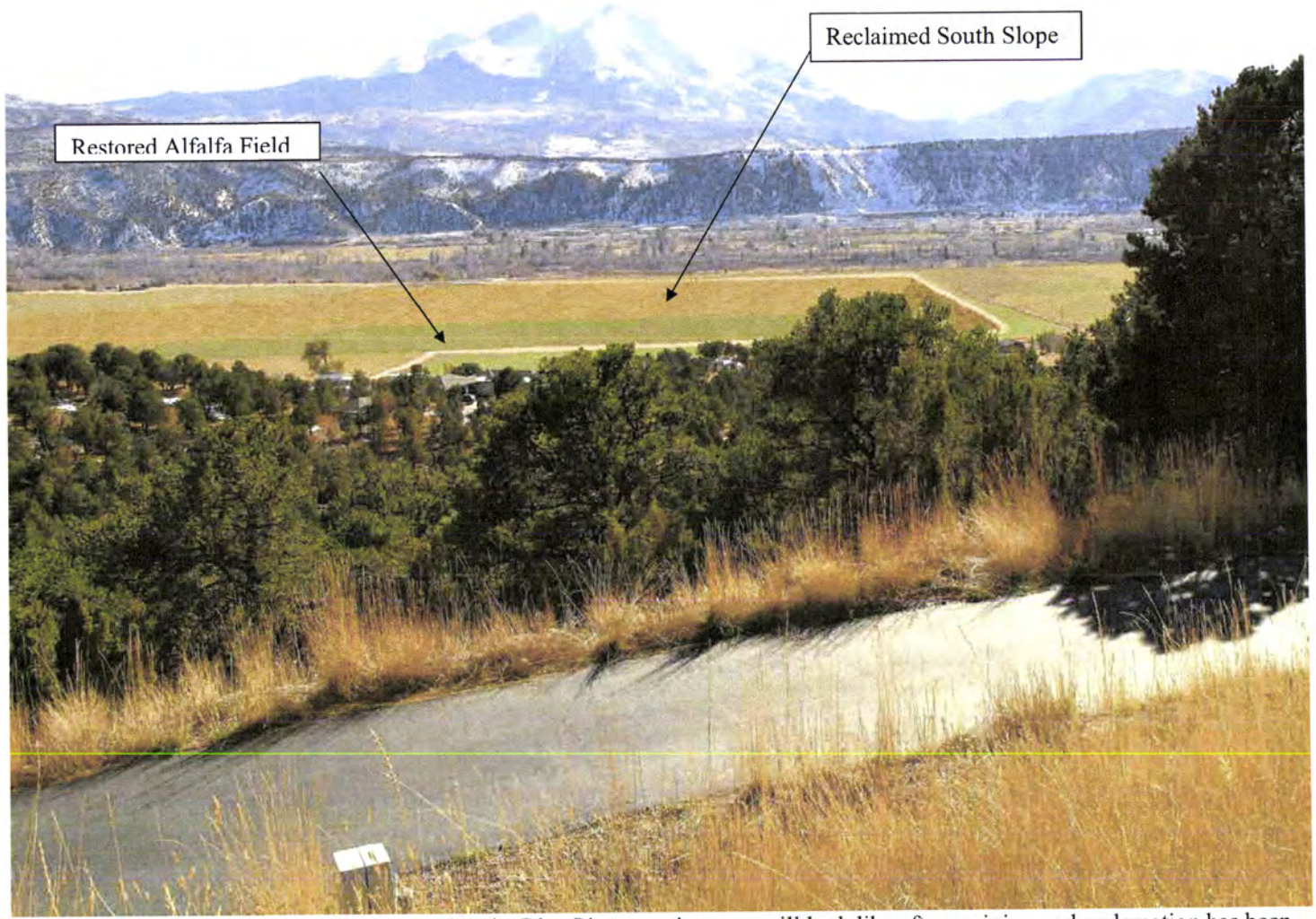
Picture 6 – This picture is a zoomed in version of the view from a bend in the road overlooking the existing pit to the south. This picture is included to show the existing permit and disturbance as well as the current status of Mining Areas 2 and 3.

Picture 6 - Normal Eye View – This picture shows Mining Area 2 area in November of 2009. This area is included in the existing permit area. Many gravel piles and the wash plant operation is currently visible on the top of the terrace. Most of this visible activity will be moved to the pit floor as Mining Area 2 is mined. The wash plant will be located in the horse pasture until there is ample room on the pit floor for the wash plant as well as the rest of the operations. This time frame is expected to be less than 3 years.



Picture 6 - Normal Eye View Modified – This picture shows Mining Area 2 mined out and the operation is at pit level starting to mine Area 3. Area 2 is included in the existing permit area. The southern reclaimed slope has been shaded to show seeding has been applied to minimize visual impact.

Picture 7 – This view looking south shows the majority of the expansion area from the highest overlooking bend in the road and represents a worst case view of the site from the homes in the area. The terrace to be mined extends from the existing gravel piles on the left of the picture to the right side where the field changes from a lighter shade of green to a darker shade.



Picture 7 - Modified – This picture shows what the Blue Pit expansion area will look like after mining and reclamation has been finished.

Conclusions

The pit and its proposed expansion is basically invisible from Highway 82 and the Roaring Fork Valley. The area of concern is the rural development of approximately 12 homes located north and uphill of the pit expansion area.

Western Slope Aggregate has spent considerable time in developing a mining and reclamation plan which is entirely based on minimizing impacts to the homeowners living north of the pit. This plan provides temporary reclamation of the visible south slope, which together with the irrigation of this slope, are mitigation items that have not been done at any other pit in Colorado, to the best of our knowledge. The costs of these items are solely for the benefit of the homeowners, since the slope will later be changed from 1.5:1 to 3:1.

Considerable effort has also been placed in the mining being expanded from the pit floor, which, due to its depth, will keep most activities invisible. The sequence of the mining is also entirely based on reducing visual impacts.

Appendix

Visual Map 1 – General Location and Photo Locations

Visual Map 2 – Cross Section

Environmental Solutions, Inc.
Biological Assessment, Wetland Delineation and Mitigation,
Fish and Wildlife Habitat Enhancement

WILDLIFE AND HABITAT ASSESSMENT
WESTERN SLOPE AGGREGATE PARCEL
GARFIELD COUNTY, COLORADO

PREPARED FOR:

Western Slope Aggregate, Inc.
c/o Sarah Kaminski, Project Manager
Banks and Gesso, LLC
720 Kipling Street, Suite 117
Lakewood, CO 80215

April 2009

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LIST OF FIGURES
(Included in the back of document)

1.0 Introduction

This report presents an evaluation of existing wildlife use and wildlife habitat conditions on the Western Slope Aggregate, Inc. parcel (the "Property") located north of Highway 82 about 2.5 miles northeast of Carbondale, Colorado. The 98-acre parcel is located in Section 25, Township 7 South, Range 88 West (Figure 1). The following analysis addresses significant wildlife uses currently occurring on the Property, and evaluates the condition and functional values of the habitat types found on the site. The report further addresses potential short- and long-term effects of the proposed action on the identified wildlife resources, including specific evaluations for species of concern.

2.0 Proposed Action

Western Slope Aggregate, Inc., (the "Company") currently operates an aggregate mining operation on land immediately adjacent and east of the study area, which has been in production since 1981. The Company has proposed an expansion of existing gravel mining operations westward to include the Property in question. The proposed expansion would allow the Company to maintain existing production levels as mining operations are completed on the current mining area and that area is abandoned reclaimed. Gravel extraction from the existing area is expected to continue until reserves are depleted. It is anticipated that expansion to the new mining area would be implemented in 4 phases (Phase 2A, 2B, 3A, 3B), with production expected to continue for approximately 12 years (Figure 2). Operations would be primarily on existing hay fields, though some minor re-grading could occur on a portion of the pinyon-covered hillside in the northeast corner.

It is anticipated that a number of mitigation measures might be implemented to protect open space for wildlife and enhance habitats for a variety of wildlife species upon completion of mining operations. Those mitigation measures are discussed in a later section.

3.0 Methods

The wildlife assessment presented herein was based on the following:

a) A review of the Colorado Natural Heritage Program (CNHP) database for Garfield County.

b) A review of current Colorado Division of Wildlife (CDOW) Natural Diversity Information Source (NDIS) species distribution maps and GAP analysis.

c) A review of Natural Resource Conservation Service (NRCS) soils data.

d) April 2009 field surveys of the Property.

e) The author's extensive field experience with a variety of wildlife and habitat-related matters in this region.

4.0 Study Area Description

Site Description

The project area consists of approximately 98 acres of gently rolling, upland habitats which have been almost entirely converted to irrigated hay production. The one exception is the far northeast corner which harbors a relatively steep hillside covered with native pinyon and juniper forest and some sagebrush. The site ultimately drains into the Roaring Fork River to the south (Figure 3). The Property was historically used for agricultural production, and continues to be used for irrigated hay production and fall/winter pasture for cattle. The Property has been well-maintained with irrigation systems in good working order, fields generally free of weedy species and fences in good repair. There were no significant hazards to wildlife movement or habitat use discovered on the Property during the site visits.

Lands adjacent to the Property include more irrigated hayfields to the west and east and a steep bluff covered by native sagebrush and pinyon pines to the south. To the north is an irrigated hayfield that abuts a mesa on which a small subdivision resides. Vegetation on the hillside is mainly native pinyon and juniper forest and some small areas of sagebrush.

Vegetation

The Property consists almost entirely of irrigated hay, with the most prevalent species consisting of Smooth brome (*Bromus inermis*), Orchardgrass (*Dactylis glomerata*), Kentucky bluegrass (*Poa pratensis*) and Dandelion (*Taraxicum officinale*). There are also small contingents of alfalfa (*Medicago sativa*), Sweetclover (*Melilotus officinalis*), Common plantain (*Plantago major*) and Western salsify (*Tragopogon dubius*) amid the hayfields. Some fields (Phase 3B site) have been recently planted solely to alfalfa (*Medicago sativa*) with a nurse crop of oats (*Avena fatua*) to get the planting established.

The only non-hay-producing areas are roadside ditches, the edges of the existing mining areas and the far northeast corner which is comprised of a mountain toe-slope covered with pinyon-juniper forest. In these non-agricultural locations a variety of plant species can be found, including Crested wheatgrass (*Agropyron cristatum*), Slender wheatgrass (*Agropyron trachycaulum*), Western wheatgrass (*Agropyron smithii*), Western yarrow (*Achillea millefolium*), along with more weedy species such as Ragweed (*Ambrosia psilostachya*), Tumblemustard (*Sisymbrium altissimum*), Curlycup gumweed (*Grindelia squarrosa*), Kochia (*Kochia scoparia*), Curled dock (*Rumex crispus*) and Russian thistle (*Salsola iberica*).

Undisturbed upland areas to the north of the Property (from the subdivision and beyond) are dominated by Pinyon pine (*Pinus edulis*), Utah juniper (*Juniperus utahensis*), Big sagebrush (*Artemisia tridentata*), Douglas rabbitbrush (*Chrysothamnus viscidiflorus*), Gambel's oak (*Quercus gambelii*) and Mountain mahogany (*Cercocarpus montanus*). The understory consists primarily of Western wheatgrass, Kentucky bluegrass, Prickly pear cactus (*Opuntia compressa*), Galleta-grass (*Hilaria jamesii*) and various penstemons (*Penstemon spp.*). There are no riparian areas nor wetlands found anywhere on the

Property, though there is a small stand of cottonwoods about ½ mile west of the Property where it is reported that eagle's sometimes perch during the winter months (Company staff, pers. comm.). A list of plant species found on the property is provided in Table 1.

Table 1: Common plants found on the Western Slope Aggregate Parcel.

ID	Scientific Name	Common Name	Stratum
1	*Bromus inermis*	Smooth Brome	H
2	*Dactylis glomerata*	Orchardgrass	H
3	*Medicago sativa*	Alfalfa	H
4	*Poa pratensis*	Kentucky Bluegrass	H
5	*Polygonum erectum*	Erect knotweed	H
6	*Amaranthus retroflexus*	Redroot Pigweed	H
7	*Hordeum jubatum*	Foxtail Barley	H
8	*Agropyron elongatum*	Intermediate Wheatgrass	H
9	*Rosa woodsii*	Wood's Rose	S
10	*Lactuca serriola*	Prickly Lettuce	H
11	*Trifolium repens*	White Clover	H
12	*Erodium cicutarium*	Redstem Filaree	H
13	*Phleum pratense*	Timothy	H
14	*Ambrosia tridida*	Giant Ragweed	H
15	*Carduus nutans*	Musk Thistle	H
16	*Chenopodium album*	Lambsquarters	H
17	*Cichorum intybus*	Chicory	H
18	*Phalaris arundinacea*	Reed Canarygrass	H
19	*Cynoglossum officinale*	Houndstongue	H
20	*Carduus acanthoides*	Plumeless Thistle	H
21	*Arctium minus*	Burdock	H
22	*Grindelia squarrosa*	Curlycup Gumweed	H
23	*Taraxicum officinale*	Dandelion	H
24	*Melilotus officinalis*	Sweetclover	H
25	*Agropyron smithii*	Western Wheatgrass	H

Soils

Soils encountered on the site were comprised entirely of Empedrado loams as mapped by the NRCS. These soils ranged from 2-6% slope and are deep, well-drained soils with moderate permeability and high water capacity. Surface runoff is medium and erosion hazard is slight on the Empedrado soils.

These soils are well-suited for hay production, small-grain crops and pasture. Records indicate this soil type can annually yield 5 tons hay/acre or 90 bushels of barley/acre under proper management. It has few limitations, but performs best if a crop residue is left covering the field over the winter and with adequate fertilizer added annually.

5.0 Significant Wildlife Use of the Property

Records searches, interviews with CDOW personnel and the site visits revealed a number of wildlife species known to use the Property. Despite the generally monocultural nature of most of the vegetation in the area, a reasonably diverse array of species frequent the Property, including elk, mule deer, coyote, cottontail rabbit, and other small mammals. A variety of bird species also utilize the area, at least seasonally, including a wide range of songbirds and raptor species. However, despite the number of species known to use the area, most are notably habitat generalists. There are no special habitat parameters nor specialized species seeking specific habitat functions on the Property.

Time and space constraints dictate that this analysis will focus on those wildlife species that are of significant ecological, economic, regulatory or political importance. Other species or ecological elements assuredly occur on the Property, but are omitted in this discussion due to one or more of the following: 1) they will not be significantly impacted by the proposed action; 2) they are not specifically regulated by local, state or federal law or code; 3) their life cycle and/or habitat use criterion do not make them reasonable indicators of probable effects to other wildlife species.

Several Federal and State-listed Threatened or Endangered species and species of special concern, which have been known to occur in Garfield County were considered but precluded from use in this analysis for a variety of reasons. Most commonly they were precluded due to the lack of suitable habitat in the study area. A complete list of these species along with their legal status and reason for dismissal from further review are shown in Table 2.

Three species were selected for analysis because of their regulatory status, sensitivity to human activities, known use of the study area, limited habitat resources in the region and/or their ability to serve as indicators of probable effects to a variety of other wildlife species. Each species is discussed, complete with known-use history, special habitat availability and likelihood of continued future habitat capability for the species. These include mule deer, elk and bald eagles.

Table 2: Threatened, Endangered and Sensitive species precluded from detailed analysis on the Western Slope Aggregate Parcel.

Common Name	Scientific Name	Status	Reason for Dismissal
Boreal Toad	*Bufo boreas*	Federal Candidate State Endangered	No Suitable Habitat
Longnose Leopard Lizard	*Gambelia wislizenii*	State Special Concern	No Suitable Habitat
Midget Faded Rattlesnake	*Crotalus viridis concolor*	State Special Concern	No Suitable Habitat
Northern Leopard Frog	*Rana pipiens*	State Special Concern	No Suitable Habitat
Yellow-Billed Cuckoo	*Coccyzus americanus*	Federal Candidate	No Suitable Habitat
Southwestern Willow Flycatcher	*Empidonax traillii extimus*	Federal Endangered State Endangered	No Suitable Habitat
Whooping Crane	*Grus americana*	Federal Endangered State Endangered	Marginal Habitat & records indicate Rare or Accidental Migrant Use Only
Plains Sharptailed Grouse	*Tympanuchus phasianellus jamesii*	State Endangered	No Suitable Habitat
Western Burrowing Owl	*Athene cunicularia*	State Threatened	No Suitable Habitat
Ferruginous Hawk	*Buteo regalis*	State Special Concern	Marginal Habitat & records indicate Rare or Accidental Migrant Use Only
Greater Sandhill Crane	*Grus Canadensis tubida*	State Special Concern	Marginal Habitat & records indicate Rare or Accidental Migrant Use Only
Long-billed Curlew	*Numenius americanus*	State Special Concern	No Suitable Habitat
Sage Grouse	*Centrocercus urophasianus*	State Special Concern	No Suitable Habitat
Lynx	*Lynx canadensis*	Federal Threatened State Endangered	No Suitable Habitat
Kit Fox	*Vulpes macrotis*	State Endangered	No Suitable Habitat
Wolverine	*Gulo gulo*	State Endangered	No Suitable Habitat
Northern River Otter	*Lutra canadensis*	State Threatened	No Suitable Habitat
Northern Pocket Gopher	*Thomomys talpoides*	State Special Concern	Marginal Habitat and records indicate broad population across state; species is poor indicator of probable effects to other species
Townsend's Big-Eared Bat	*Plecotus townsendii*	State Special Concern	No Suitable Habitat

Mule Deer and Elk: These two species are grouped because they are both large ungulate grazers and are important to social and economic functions of local communities. Further, both these species serve as "umbrella species," which means that if habitat requirements to meet the needs of these species are present, then we can safely assume that a great many other species will be adequately supported in the area as well (Caro & O'Doherty 1999, Lambeck 1997, Roberge & Angelstam 2004).

Mule deer are known to utilize the site throughout the year. The Property is not considered to be a production area but is shown as normal summer range for the species. There are no migration corridors mapped on the site by CDOW. However, the Property is listed as a Winter Concentration Area, which areas are defined as locations that harbor 200% higher densities of animals than surrounding areas of defined winter range in the five average winters out of ten. The entire Property is also mapped by CDOW as Severe Winter Range for mule deer, which is defined as the area on which 90% of the animals may occur when annual snowpack is at its maximum and/or when temperatures are at their lowest during the worst two winters out of ten. CDOW considers such sites as critical habitat for the species and gives these areas the highest habitat priority ranking for both deer and elk.

However, because the Property has been cleared of all native shrub species and is managed as an irrigated hayfield, forage available for deer during the winter season is extremely limited, and particularly so under the severe, deep-snow circumstances indicative of CDOW's definition of critical winter conditions. Further, the size of the irrigated fields also makes the area less attractive for deer due to the flat terrain and distance from security cover. That said, deer do make some use of the hayfields throughout the year so long as snow cover remains shallow enough and uncrusted to permit them to forage. Generally, however, deer make notably less use of the Property than do elk.

Elk are known to utilize the area fairly regularly, mainly from mid-fall as they seek refuge during hunting seasons, and throughout the winter months as long as snow cover remains light enough to allow them to forage. Elk can tolerate deeper, crustier snow surfaces than deer, and can also persist on a lower-quality diet, which explains the relatively higher use levels by elk noted in the area. However, though elk use the area more than deer, this does not imply that elk use is significant in the regional context. Given the amount of existing development and presence of the county road through the valley, much of the elk utilization of the area is done nocturnally as the herds seek to avoid human interaction, though they can occasionally be found on the Property in daylight hours. There are no mapped summer range, production areas or migration corridors for elk on the Property, and surprisingly, none of Property is mapped as any kind of winter range at all by CDOW. This is surprising in that CDOW typically maps general winter range with a fairly broad stroke and the bulk of elk use on the Property clearly occurs during the winter months. Since elk are generalist grazers, the lack of the native shrub component over much of the site and the dominance of irrigated grass hay does not render the rangeland as unsuitable for them as it does for deer. However, like the deer, elk require some areas of security cover and adequate travel corridors in order to utilize the site, and the broad expanse of open forage and lack of security cover may be

the reason CDOW does not include this site in its winter range mapping. If subdivision development becomes more dense to the north and associated daily human activity levels increase, the site will become less attractive to elk.

Bald Eagle: This species was selected because it is listed as a State Threatened species and because they select relatively quiet, undisturbed riparian sites for nesting, and they require healthy aquatic ecosystems to provide adequate food resources. As such, they are an excellent indicator of the relative health and viability of many other species in the area.

There are no Bald eagle nests known to occur on the Property, and the nearest active nest site is over 30 air-miles away from the Property on the Colorado River itself. There are two known winter roost sites bald eagles frequent along the Roaring Fork River just southwest of the Catherine Store. Employees of the Company also indicated that they have seen bald eagles flying in the vicinity during winter months, which would be expected due to the relative proximity of the Roaring Fork corridor and much of the valley being mapped as winter foraging habitat for the species. However, there are no critical habitat parameters for this species on the Property. The scarcity of mature cottonwoods or other tall tree species suitable for eagle nest sites, the abundance of roads and human activity already taking place in the area and the distance from the Roaring Fork River makes this a very unattractive location for nesting or roosting. The plethora of mature cottonwoods present along many miles of the Roaring Fork river corridor provide numerous adequate perches for hunting or roosting as well as nest sites along the river, which supplies far more productive habitat for this species than anything found on the Property.

6.0 Potential Effects of the Proposed Project

The proposed project will result in significant surface disturbance of the relatively level hayfields on the Property. Gravel extraction requires removal and stockpiling of topsoil and overburden subsoils, and the mining itself removes aggregate materials permanently, changing the contours of the site in perpetuity. The direct physical effects to existing habitat are clear: open space, forage production and overall habitat availability will be significantly decreased on the Property during mining operations. Indirect effects include dust and particulate emissions, noise pollution and potential traffic collisions with wildlife. However, the effect of this habitat impact may be limited to the temporal effects of the mining activity, which is already occurring. Reclamation plans include restoring the Property to agricultural production at the conclusion of mining operations, which obviously limits these impacts to the lifespan of mining activities. For the purposes of this report, it is true that the Property will experience a loss of habitat value for deer and elk, though less so for bald eagles, during the productive lifespan of the pit. It should be noted, however, that both the direct and indirect impacts discussed above will occur in phases on a 98-acre parcel of marginal, open habitat. Such an impact will clearly be minor when viewed in a regional habitat context.

These cumulative changes will likely decrease suitability of remaining habitat for most species, though prolific, adaptable species such as cottontail rabbits, red fox and a number of songbird species may persist or even increase in abundance. Potential effects and opportunities posed by the project for the key species identified in Section 5 are discussed below.

Mule Deer and Elk: Since both mule deer and elk make primary use of the Property during winter months, and since winter habitat has been identified as the critical component for herd sustainability in much of the State, the proposed development will likely have some minor negative effects to both species. However, since the existing habitat consists of irrigated hay fields, the Property is of limited value as winter range for these species in any event. Mitigation measures that promote an increase the shrub and tree components of the undeveloped vegetative community and create additional cover and feed resources (which would be available above snowpack in severe winters) would be of great benefit to mule deer, though less so for elk. The critical parameter in this instance will be to limit vegetation removal in all phases to minimize disturbance at any point in time and to reclaim disturbed areas with a variety of grass and forb species as quickly as possible after mining activities cease.

Bald Eagle: The absence of tall snags and mature tree species on the Property, its distance from the Roaring Fork River, existing urban development north of the site, and the plethora of superior habitat along the river corridor itself all significantly limit the suitability of this site for Bald eagles. Further, available habitat for key prey species on which eagles depend is also limited on the Property. The proposed mining operation is very unlikely to negatively affect bald eagles in any way.

7.0 Potential Mitigation Measures

Since much of the open space and currently available habitat on the Property will be impacted during mining operations, those areas that remain undisturbed or which can be reclaimed will become increasingly important. The chief post-mining objective is to reclaim as much of the site as possible to agricultural production matching the current condition now found on the Property. There may also be an opportunity to develop multiple habitat parameters in the area, creating diversity and microclimates suitable for a broad variety of plant species that serve as both forage and security cover as well as travel corridors connecting fragmented habitats.

Protection

First and foremost will be protecting those areas during construction activities to minimize loss of vegetation and minimize soil erosion potential while adjacent areas are being developed. Soil disturbance during construction invites noxious weed invasion on surrounding areas and promotes establishment of a seed-source on the construction site. Therefore, weed monitoring and an active, multi-faceted control program should be implemented concurrent with construction activities. This would involve bi-weekly monitoring during the growing season throughout all phases of construction to rapidly identify weed species as they try to establish themselves, followed by immediate control

efforts utilizing mechanical and chemical control methods as appropriate. The Proponent has already developed an integrated weed control plan detailing weed identification and appropriate control measures for each species to which contractors must adhere during the construction process.

One final protective measure could include pet restrictions, which should be enforced by disallowing employees to bring dogs onto the jobsite to prevent domestic dogs from running at-large and harassing wildlife.

Enhancement

Once mining operations on any phase have been completed, that area should be reclaimed as quickly as possible. For areas of the Property to be returned to agricultural production, the area should be contoured appropriately for maximum irrigation efficiency, irrigation capability restored to the site, soils returned to their proper locations (last out, first in) and all disturbed areas reseeded with a grass-legume hay mixture. Typical mixtures include orchardgrass, timothy, smooth brome and alfalfa.

For those areas not suitable for ag-production, those sites should be re-seeded with an appropriate seed mixture containing species that are adapted to the soil and climatic conditions of that particular site, and which will establish quickly, compete well with potential noxious weeds and provide a preferred food source for native wildlife in the area. The fundamental idea is to formulate a seed mix with components that will establish quickly to retain exposed soils and prevent erosion, and other components that will remain established long-term, able to compete with potentially invasive species, and yet a third component that will offer a nutritious and palatable feed source for the targeted wildlife species. Specific seed mixes and planting rates could be easily developed for specific site conditions around the Property. However, for the purposes of this report, such a mix for the Carbondale region generally should include Intermediate, Western and Slender wheatgrasses, Sheep fescue, muttongrass, Needle-and-Thread-grass, Small burnet, a dryland-adapted alfalfa, a contingent of clover species and sainfoin. Planting rate should be about 20 lbs/PLS/acre.

8.0 Literature Cited

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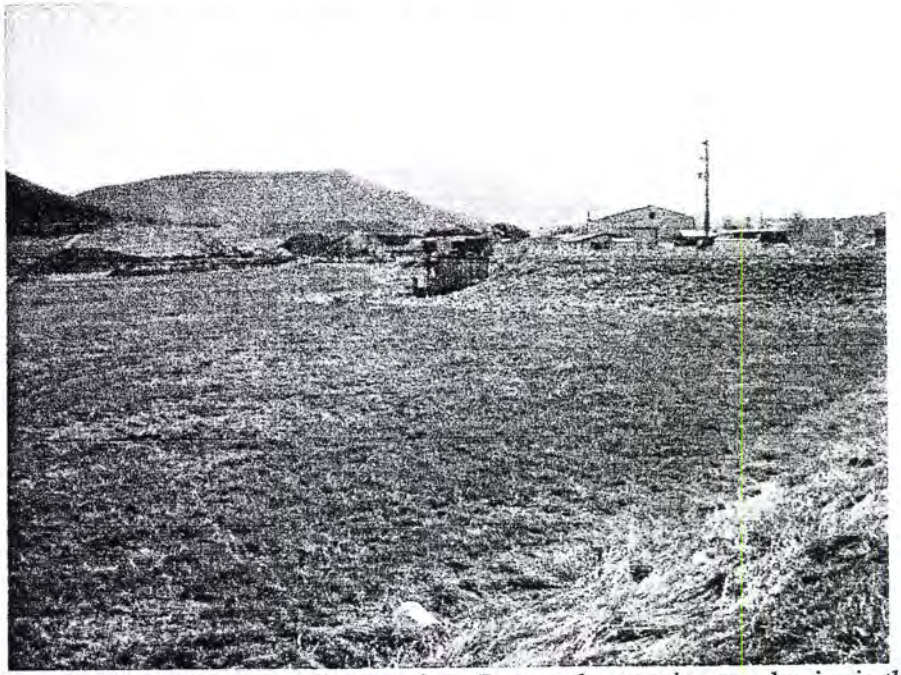
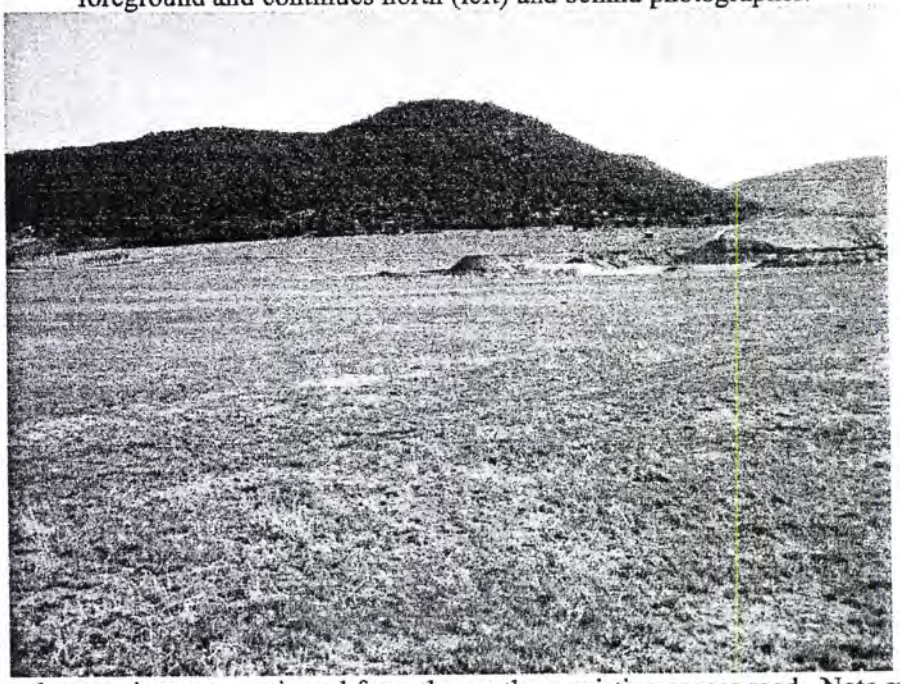
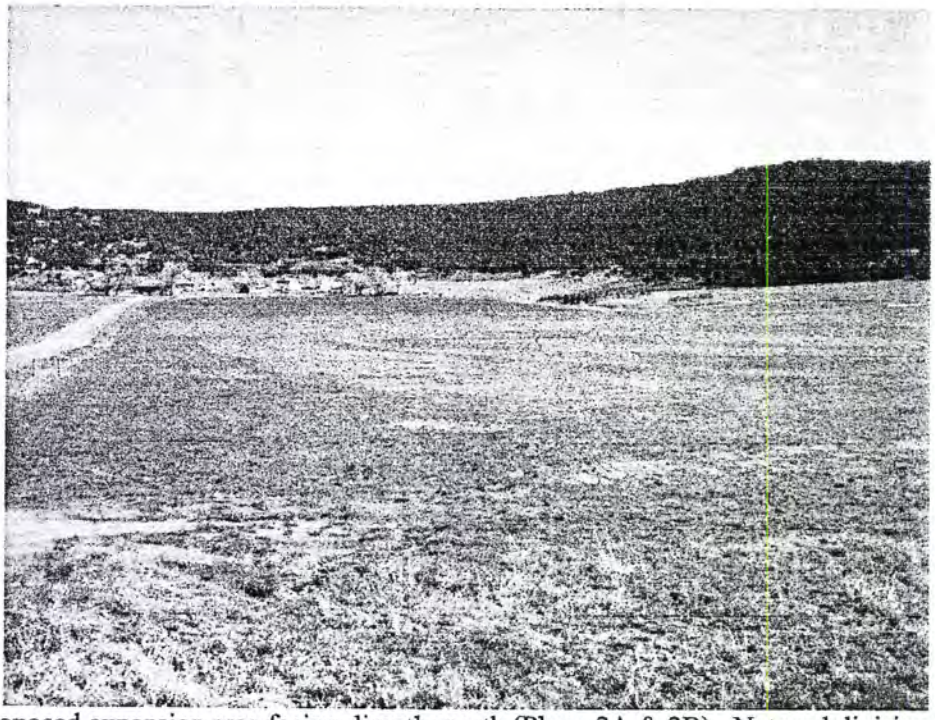
9.0 Photographic Documentation of Existing Conditions



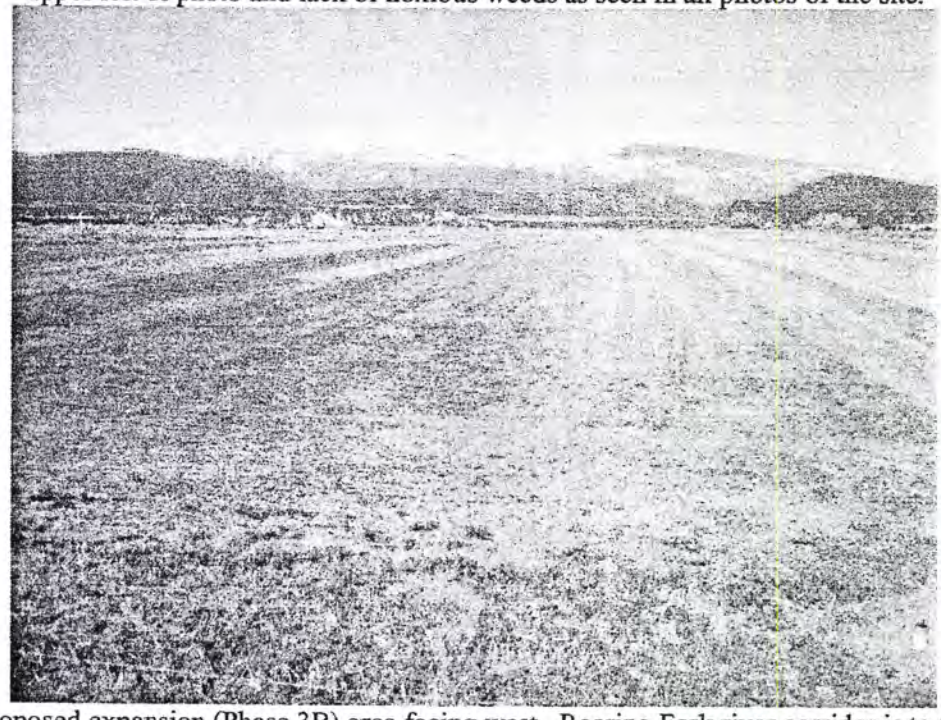
West side of existing gravel pit operation. Proposed expansion area begins in the foreground and continues north (left) and behind photographer.



Proposed expansion area as viewed from the south on existing access road. Note current gravel extraction on adjacent property to the east. Toe-slope of pinyon-covered hillside is not expected to be disturbed.



Proposed expansion area facing directly north (Phase 2A & 2B). Note subdivision in upper left of photo and lack of noxious weeds as seen in all photos of the site.



Proposed expansion (Phase 3B) area facing west. Roaring Fork river corridor is to the left. Note lack of weeds even in the recently-planted alfalfa field and roadside ditches.

COLORADO HISTORICAL SOCIETY FILE SEARCH **APPENDIX I**

COLORADO HISTORICAL SOCIETY
Office of Archaeology and Historic Preservation
1300 Broadway Denver, Colorado 80203

April 21, 2009

Ms. Sarah Kaminski
Banks and Gesso, LLC
720 Kipling Street, Suite 117
Lakewood, CO 80215

Re: Carbondale Amendments, Western Slope Aggregates (Project 09012)
File Search No. 15174

At your request, the office of Archaeology and Historic Preservation has conducted a search of the Colorado Inventory of Cultural Resources for the following locations:

PM	Township	Range	Section
6th	7S	88W	25

1 site and 1 survey were located in the designated area(s).

If information on sites in the project area was found, detailed information follows the summary. If no sites or districts were found, but surveys are known to have been conducted in the project area, survey information follows the summary. We do not have complete information on surveys conducted in Colorado, and our site files cannot be considered complete because most of the state has not been surveyed for cultural resources. There is the possibility that as yet unidentified cultural resources exist within the proposed impact area.

Therefore, in the event there is Federal or State involvement, we recommend that a professional survey be conducted to identify any cultural resources in the project area, which are eligible to be listed in the National Register of Historic Places. We look forward to consulting with you regarding the effect of the proposed project on any eligible cultural resource in accordance with the Advisory Council on Historic Preservation Procedures and the Preservation and Protection of Historic and Cultural Resources (36 CFR 800). Please provide this office with the results of the cultural resource survey for our review of professional adequacy and compliance with regulations.

If you have any questions, please contact the Office of Archaeology and Historic Preservation at (303) 866-3395 or 3392.

Thank you for your interest in Colorado's cultural heritage.

Susan M. Collins
Deputy State Historic Preservation Officer for Archaeology

*Information regarding significant archaeological resources is excluded from the Freedom of Information Act. Therefore, legal locations of these resources must not be included in documents for public distribution.

COLORADO HISTORICAL SOCIETY-
OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION
SURVEY REPORT

SURVEY ID	SURVEY NAME	PROCEDURE
RC.CH.R94	A CLASS III CULTURAL RESOURCES SURVEY OF THE ROARING FORK RAILROAD AUTHORITY ENVIRONMENTAL IMPACT STATEMENT, GLENWOOD SPRINGS TO BRUSH CREEK TRANSPORTATION CORRIDOR, EAGLE, GARFIELD, AND PITKIN COUNTIES, COLORADO	LINEAR

COUNTY	LEAD AGENCY	INSTITUTION
Multiple County	Colorado Department of Transportation (CDOT)	Western Cultural Resource Management, Inc. (WCRM

AUTHOR	DOCUMENT
CRABBELLAN, COLLETTE C. AND STEVEN F. MEHLS	A CLASS III CULTURAL RESOURCES SURVEY OF THE ROARING FORK RAILROAD AUTHORITY ENVIRONMENTAL IMPACT STATEMENT, GLENWOOD SPRINGS TO BRUSH CREEK TRANSPORTATION CORRIDOR, EAGLE, GARFIELD, AND PITKIN COUNTIES, COLORADO

METHOD	COMPLETED	REMARKS	TOTAL ACRES	SITE(S)	IF(S
CLASS III	10/29/1998	THREE HISTORIC SITES AND 15 HISTORIC ISOLATED FINDS WERE RECORDED. FOUR HISTORIC SITES WERE REEVALUATED.	447.000	7	1
	03/14/2008	MAT			

*** LOCATION INFORMATION ***

MAPS	P.M.	TWNSHP	RANGE	SEC		UTM.
HIGHLAND PEAK	6TH	T6S	R89W	S5	S	13;2 97 356ME; 43 81 226MN
WOODY CREEK	6TH	T6S	R89W	S6	SE	13;2 97 354ME; 43 81 256MN
BASALT	6TH	T6S	R89W	S8	NE	13;2 97 953ME; 43 81 291MN
LEON	6TH	T6S	R89W	S9	ALL	13;2 98 934ME; 43 81 045MN
CARBONDALE	6TH	T6S	R89W	S16	E	13;2 99 148ME; 43 80 719MN
CATTLE CREEK	6TH	T6S	R89W	S21	NE	13;2 99 206ME; 43 80 497MN
GLENWOOD SPRINGS	6TH	T6S	R89W	S22	S	13;2 99 921ME; 43 80 071MN
					NW	
	6TH	T6S	R89W	S26	W	13;2 99 950ME; 43 79 872MN
	6TH	T6S	R89W	S27	E	13;3 00 219ME; 43 79 966MN
	6TH	T6S	R89W	S35	S	13;3 00 219ME; 43 79 937MN
					NW	
	6TH	T6S	R89W	S36	SW	13;2 99 927ME; 43 79 791MN
	6TH	T7S	R87W	S31	ALL	13;3 00 020ME; 43 79 375MN
	6TH	T7S	R87W	S32	ALL	13;3 00 038ME; 43 79 153MN
	6TH	T7S	R87W	S33	S	13;2 99 886ME; 43 78 626MN
	6TH	T7S	R87W	S34	S	13;3 00 420ME; 43 77 471MN
	6TH	T7S	R88W	S7	W	13;3 00 536ME; 43 76 870MN
	6TH	T7S	R88W	S17	SW	13;3 01 224ME; 43 76 298MN
	6TH	T7S	R88W	S18	E	13;3 01 875ME; 43 75 640MN
	6TH	T7S	R88W	S20	S	13;3 02 143ME; 43 75 061MN
					NW	
	6TH	T7S	R88W	S25	SW	13;3 02 439ME; 43 73 226MN
	6TH	T7S	R88W	S26	S	13;3 04 191ME; 43 72 030MN
	6TH	T7S	R88W	S27	S	13;3 04 690ME; 43 71 658MN
	6TH	T7S	R88W	S28	S	13;3 05 580ME; 43 68 785MN
					NW	
	6TH	T7S	R88W	S29	NE	13;3 07 407ME; 43 65 944MN
	6TH	T7S	R88W	S33	NE	13;3 07 686ME; 43 65 409MN
	6TH	T7S	R88W	S34	S	13;3 10 515ME; 43 65 075MN
					NW	
	6TH	T7S	R88W	S35	S	13;3 14 068ME; 43 64 144MN
	6TH	T7S	R88W	S36	S	13;3 16 643ME; 43 63 632MN
	6TH	T7S	R89W	S1	N	13;3 19 955ME; 43 62 498MN
					SE	
	6TH	T8S	R85W	S31	SW	13;3 20 858ME; 43 61 573MN
	6TH	T8S	R86W	S7	S	13;3 21 250ME; 43 60 289MN
	6TH	T8S	R86W	S17	S	13;3 21 903ME; 43 59 657MN
					NW	
	6TH	T8S	R86W	S18	N	13;3 22 230ME; 43 59 244MN
					SE	
	6TH	T8S	R86W	S20	N	13;3 23 361ME; 43 59 266MN
	6TH	T8S	R86W	S21	S	13;3 24 461ME; 43 59 091MN
					NW	
	6TH	T8S	R86W	S22	SW	13;3 26 681ME; 43 57 056MN
	6TH	T8S	R86W	S25	S	13;3 27 845ME; 43 56 523MN
	6TH	T8S	R86W	S26	N	13;3 28 629ME; 43 55 544MN

COLORADO HISTORICAL SOCIETY
OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION
NUMERICAL SITE LISTING

SITE NUMBER	SITE NAME	SITE TYPE	DISTRICT	OWNER TYPE
5GF.1663	COLORADO MIDLAND RAILROAD GRADE	Historical Archaeology-Historic		

COUNTY	ADDRESS
Garfield	

ASSESSMENT	DATE	RECORDER	RECORDER DATE	CONDITION	CONDITION DATE
Field eligible	08/04/1993	Metcalf Archaeological Consultants	08/04/1993	Heavy Disturbance	08/04/1993

DOCUMENT(S)	DOCUMENT NAME
GF.CH.RS	GLENWOOD SPRINGS ALTERNATIVE TRANSPORTATION ROUTE CULTURAL RESOURCE INVENTORY, GARFIELD COUNTY, COLORADO (ORIGINAL AND ADDENDUM)
GF.EP.RI	CULTURAL RESOURCE INVENTORY FOR THE GLENWOOD SPRINGS 201 FACILITY PLAN, CITY OF GLENWOOD SPRINGS, GARFIELD COUNTY, COLORADO

SITE TYPE	CULTURE	FEATURE	FEATURE COUNT	ARTIFACT	ARTIFACT COUNT
HISTORIC, RAILROAD GRADE	NOT ON FORM	RAILROAD GRADE			

SITE TYPE	STYLE	FEATURES	ARCHITECT	INTEGRITY	EARLY DATE	LATE DATE	ORIGINAL USE	PRESENT USE
RAILROAD GRADE					1887	1887	TRANSPORTATION	TRANSPORTATION

*** LOCATION INFORMATION ***

TOPO QUADS	P.M.	TWNSHP	RANGE	SEC	QUARTER
GLENWOOD SPRINGS	6TH	T6S	R89W	S9	NE SW NW
CARBONDALE		SW NW NW			
LEON		E E SW			
CATTLE CREEK		NE NW NE SW			
		SW SE NW			
		NE SE SW NW			
	6TH	T6S	R89W	S16	W W SE
		E E NW			
	6TH	T6S	R89W	S21	W W SE NE
		E NW NE			
		NE NE SE SE			
		SE NE SE			
		NW NE SE			
		NW NE SE			
	6TH	T6S	R89W	S22	W SW SW
	6TH	T6S	R89W	S27	E E W SE
		SE SW NE			
		NW SW NE			
		S NE NW			
		NE NW NW			
	6TH	T6S	R89W	S34	E NE SE
		E SE NE			
		NE NW SE NE			
		W NE NE			
	6TH	T6S	R89W	S35	SE SE SW
		S NW SE SW			
		N SW SW			
		W SW NW SW			
	6TH	T7S	R89W	S18	SW SW SW
	6TH	T7S	R89W	S13	E NW NE
		SW SW NE NE			
		W SE NE			
		SW SE SE			
		NE NE SE			
	6TH	T7S	R89W	S12	E W SE
		E SW NE			
		NE NW SW NE			
		SE NW NE			
		E NE NE NW			
	6TH	T7S	R89W	S1	E E SW
		N NW NE SW			
		S SW NW			
	6TH	T7S	R89W	S2	S NE NE
		N NW NE			
		NE NE NE NW			
	6TH	T7S	R88W	S28	S NE SE
		SE NW SE			

COLORADO HISTORICAL SOCIETY
OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION
SURVEY REPORT

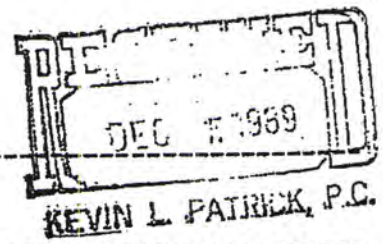
6TH	T8S	R86W	S27	N
6TH	T8S	R86W	S36	NE
6TH	T8S	R87W	S2	S
6TH	T8S	R87W	S3	ALL
6TH	T8S	R87W	S4	N
6TH	T8S	R87W	S10	NE
6TH	T8S	R87W	S11	ALL
6TH	T8S	R87W	S12	S
6TH	T8S	R87W	S13	N
6TH	T9S	R85W	S5	SW
6TH	T9S	R85W	S6	S
NW				
6TH	T9S	R85W	S8	N
SE				
6TH	T9S	R85W	S9	SW
6TH	T9S	R85W	S16	ALL
6TH	T9S	R85W	S21	N
SE				
6TH	T9S	R85W	S28	NE

13	3	30	609	ME;	43	55 195 NW
13	3	31	970	ME;	43	54 760 NW
13	3	33	091	ME;	43	53 378 NW
13	3	34	016	ME;	43	51 561 NW
13	3	34	386	ME;	43	51 495 NW
13	3	37	063	ME;	43	49 341 NW
13	3	37	459	ME;	43	48 092 NW
13	3	37	986	ME;	43	45 683 NW
13	3	37	944	ME;	43	45 683 NW
13	3	37	424	ME;	43	46 322 NW
13	3	36	736	ME;	43	48 816 NW
13	3	35	224	ME;	43	50 440 NW
13	3	34	005	ME;	43	51 430 NW
13	3	33	232	ME;	43	52 660 NW
13	3	32	024	ME;	43	54 619 NW
13	3	30	773	ME;	43	55 087 NW
13	3	28	901	ME;	43	55 272 NW
13	3	27	965	ME;	43	56 327 NW
13	3	26	637	ME;	43	56 969 NW
13	3	26	322	ME;	43	56 980 NW
13	3	23	361	ME;	43	58 863 NW
13	3	22	915	ME;	43	58 874 NW
13	3	20	641	ME;	43	59 657 NW
13	3	19	563	ME;	43	61 061 NW
13	3	17	713	ME;	43	62 367 NW
13	3	17	441	ME;	43	62 748 NW
13	3	16	124	ME;	43	63 390 NW
13	3	14	710	ME;	43	63 009 NW
13	3	10	498	ME;	43	63 096 NW
13	3	09	040	ME;	43	63 880 NW
13	3	08	322	ME;	43	65 099 NW
13	3	07	625	ME;	43	65 371 NW
13	3	05	655	ME;	43	68 374 NW
13	3	05	383	ME;	43	68 940 NW
13	3	04	665	ME;	43	71 574 NW
13	3	03	631	ME;	43	72 162 NW
13	3	02	358	ME;	43	73 184 NW
13	3	02	042	ME;	43	74 567 NW
13	3	01	890	ME;	43	75 372 NW
13	3	01	096	ME;	43	76 286 NW
13	3	00	584	ME;	43	76 623 NW
13	2	99	856	ME;	43	78 593 NW
13	2	99	989	ME;	43	79 359 NW
13	2	99	858	ME;	43	79 655 NW
13	2	99	910	ME;	43	79 999 NW
13	2	99	358	ME;	43	80 256 NW
13	2	99	166	ME;	43	80 500 NW
13	2	99	031	ME;	43	80 900 NW
13	2	98	665	ME;	43	81 079 NW
13	2	97	947	ME;	43	81 253 NW

APPROVED AUGMENTATION PLAN

APPENDIX J

DISTRICT COURT, WATER DIVISION NO. 5, COLORADO



Application No. 87CW365

RULING OF REFEREE (1 of 2)

CONCERNING THE APPLICATION FOR WATER RIGHTS OF: JEAN BLUE AND DEE BLUE, IN GARFIELD COUNTY

The above entitled Application was filed on December 29, 1987, and was referred to the undersigned as Water Referee for Water Division No. 5, State of Colorado, by the Water Judge of said Court on the 11th day of January, 1988, in accordance with Article 92 of Chapter 37, Colorado Revised Statutes 1973, known as The Water Right Determination and Administration Act of 1969.

And the undersigned Referee having made such investigations as are necessary to determine whether or not the statements in the Application are true and having become fully advised with respect to the subject matter of the Application does hereby make the following determination and Ruling as the Referee in this matter, to wit:

1. The statements in the Application are true.

2. The name of the structure is the Sunnyside Gravel Pit Pond.

3. The names of the Claimants and address: Jean Blue and Dee Blue; c/o Kevin L. Patrick, P.C.; 106 S. Mill Street, Suite 200; Aspen, CO 81611.

4. The source of the water is the Roaring Fork River, a tributary of the Colorado.

5. The pond will be filled primarily from water diverted through the Sunnyside Industrial Well No. 1 and in times of emergency from the Basin Ditch in accordance with the Decree entered in Case No. 87CW364.

6. The dam is located in the SW1/4SE1/4, Sec. 25, T. 7 S., R. 88 W. of the 6th P.M., at a point whence the SE Corner of said Sec. 25 bears S. 60°24' E. a distance of 2571 feet (Garfield County).

7. The use of the water is industrial, mining, dust suppression and manufacturing with the right to use and reuse and completely consume the same.

8. The date of the initiation of appropriation is May 1, 1982.

9. The amount of water claimed is 3.2 acre feet of water, absolute.

10. The Claimant shall have the right to fill and refill when and if water is physically and legally available.

BASIN DITCH

The Referee does therefore conclude that the above entitled application should be granted and that 3.2 acre feet of water with an appropriation date of May 1, 1982 is hereby awarded absolute to the Sunnyside Gravel Pit Pond for industrial, mining, dust suppression and manufacturing with the right to use, reuse, and completely consume the same, with the right to fill and refill when and if water is physically and legally available; subject, however, to all earlier priority rights of others and to the integration and tabulation by the Division Engineer of such priorities and changes of rights in accordance with law.

It is accordingly ORDERED that this Ruling shall be filed with the Water Clerk subject to Judicial review.

It is further ORDERED that a copy of this Ruling shall be filed with the appropriate Division Engineer and the State Engineer.

Dated November 2, 1989

BY THE REFEREE:

Ray D. Walker
Water Referee
Water Division No. 5
State of Colorado

No protest was filed in this matter. The foregoing Ruling is confirmed and approved, and is made the Judgment and Decree of this Court.

Dated December 1, 1989

Water Judge

DISTRICT COURT, WATER DIVISION NO. 5, COLORADO

Application No. 87CW365

RULING OF REFEREE (2 of 2)

CONCERNING THE APPLICATION FOR WATER RIGHTS OF: JEAN BLUE AND DEE BLUE, IN GARFIELD COUNTY

The above entitled Application was filed on December 29, 1987, and was referred to the undersigned as Water Referee for Water Division No. 5, State of Colorado, by the Water Judge of said Court on the 11th day of January, 1988, in accordance with Article 92 of Chapter 37, Colorado Revised Statutes 1973, known as The Water Right Determination and Administration Act of 1969.

And the undersigned Referee having made such investigations as are necessary to determine whether or not the statements in the Application are true and having become fully advised with respect to the subject matter of the Application does hereby make the following determination and Ruling as the Referee in this matter, to wit:

1. The statements in the Application are true.

2. The name of the structure is the Sunnyside Industrial Well No. 1.

3. The names of the Claimants and address: Jean Blue and Dee Blue; c/o Kevin L. Patrick, P.C.; 106 S. Mill Street, Suite 200; Aspen, CO 81623.

4. The source of the water is groundwater tributary to the Roaring Fork River, a tributary of the Colorado River.

5. The point of diversion is a well located in the SW1/4SE1/4 of Sec. 25, T. 7 S., R. 88 W. of the 6th P.M., at a point whence the SE Corner of said Sec. 25 bears S. 62°33' E. a distance of 1865 feet (Garfield County).

6. Uses of the water are industrial, mining, dust suppression and manufacturing with the right to use and reuse and completely consume the same.

7. Date of initiation of appropriation is October 26, 1987.

8. The amount of water claimed is 1.0 c.f.s. (450 g.p.m.), conditional.

9. This well will be operation in conjunction with a Plan for Augmentation in Case No. 87CW364.

10. On October 10, 1989, the Court approved Case No. 87CW364, which orders the Office of the State Engineer to grant a permit subject to the terms of the plan for augmentation. Additionally, on November 10, 1988, the Office of the Colorado State Engineer denied said Well in File No. AD-11752; therefore, the application for water rights may be acted upon by the Water Referee.

The Referee does therefore conclude that the above entitled application should be granted and that 1.0 c.f.s. with an appropriation date of October 26, 1987 is hereby awarded to the Sunnyside Industrial Well No. 1 for industrial, mining, dust suppression and manufacturing with the right to use, and reuse the same, and completely consume, provided always that said quantities of water be diverted and applied to beneficial use within a reasonable time; subject, however, to all earlier priority rights of others and to the integration and tabulation by the Division Engineer of such priorities and changes of rights in accordance with law.

Application for a Quadrennial Finding of Reasonable Diligence shall be filed in October of 1993 and in October of every fourth calendar year thereafter so long as the Claimant desires to maintain this conditional water right or until a determination has been made that this conditional water right has become absolute by reason of the completion of the appropriaiton.

It is accordingly ORDERED that this Ruling shall be filed with the Water Clerk subject to Judicial review.

It is further ORDERED that a copy of this Ruling shall be filed with the appropriate Division Engineer and the State Engineer.

Dated October 31, 1989

BY THE REFEREE:

Ray D. Walker
Water Referee
Water Division No. 5
State of Colorado

[illegible] of the foregoing Court
[illegible] of record Water
[illegible] Div. Engineer and
[illegible] State 11-3-89
Nancy Barley
Patricia Smith

No protest was filed in this matter. The foregoing Ruling is confirmed and approved, and is made the Judgment and Decree of this Court.

Dated December 1, 1989

Water Judge

[illegible] of the foregoing mailed to
[illegible] of record Water
[illegible] Engineer and
[illegible] 12-4-89
Nancy Barley
Patricia Smith

wsu 2/2

WEED MANAGEMENT PLAN

APPENDIX K

Weed Management Plan – Blue Pit
Western Slope Aggregate – Carbondale, CO – April 2010

The expansion area of the Blue Pit is a well managed irrigated field and has little to no weeds present. The existing weed infestations are shown on the Weed Management Plan Map. The primary infestation of kochia is on the large topsoil stockpile located on the east side of Mining Area 1 within the existing permit area. Additional small areas of weeds are located along the roads and on the southern slope of Mining Area 1. The existing weeds are anticipated to be removed within 2 years of treatment. Areas around the mining operation that have not been disturbed do not show signs of infestation.

Weeds will be sprayed by a weed control contractor who is familiar with the area and species that will be encountered. The contractor will come to the site once a year in the early summer when the weeds are most vulnerable and treat each location with appropriate herbicide or as frequent as determined to be necessary by the county vegetation specialist. Once the existing infestations have been controlled, an annual weed survey will be conducted to inspect for any new infestations either in the mining or reclamation areas. If new areas are identified, a specific plan will be produce to remove the weeds. The findings and proposed treatment will be submitted to the Garfield County Vegetation Specialist.

As part of the DRMS bond release inspection a weed survey will be conducted and any infestations of noxious weeds will result in the bond not being released until the weeds are removed. Garfield County officials are welcome to attend any of these inspections to verify that the weed infestations are being addressed.