

WATER PERMIT NO. 1886-1

Name of Applicant: **Homestake Mining of California**

Address: **630 E Summit, Lead SD 57754-4680**

Phone: **605 722-4680**

Amount of Water Claimed: Total Acres: **NA**

Source of Water Supply: **Deadwood Creek**

Water to be used for: County: **Lawrence**

Type of Waste Disposal System:

Location: **northwest of Lead**

PRIORITY Date Received: **3-8-07**

Application/License Fee: **\$200**

Corrected Application Received: **4-10-07**

Period of Annual Use: **January 1 – December 31**

Remarks: **Relocate a portion of Deadwood Creek bed**

Diversion Point: **S ½ Sec 29-T5N-R3E**

Land to be Irrigated: **NA**

Depth of Well: **NA**

Well Driller:

Remarks:

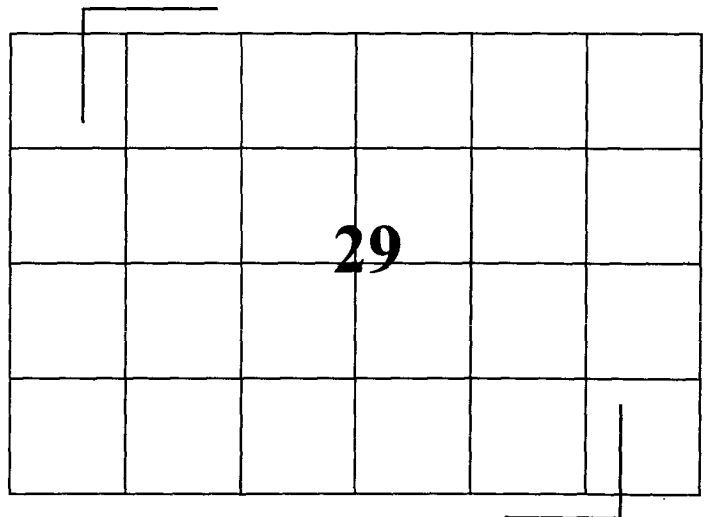
Type of Map: **plat**

Prepared by: **Andrew D Bachman, PE**

Reviewed and the Number Assigned on: **4-10-07**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>1886-1</u> (office use only) Hydrologic Unit <u>10120202</u>
	Basin <u>Belle Fourche River</u>
	Newspaper <u>Lawrence Co Journal</u>
	<u>376 main Deadwood 57732</u> <u>605 578-3305</u>

RECEIVED
MAR - 8 2007
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

- | | | | |
|---|---|--|--|
| ☐ Municipal | ☐ Suburban Housing | ☐ Recreational | ☐ Institutional |
| ☐ Rural Water System | ☐ Commercial | ☐ Fish & Wildlife | ☐ Geothermal Heat |
| ☐ Domestic (over 18 gpm) | ☐ Industrial | ☒ Other <u>Relocate portion of creek bed</u> | |

Type of Application: (check one)

- ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

1. Name of Applicant Homestake Mining of California Phone (605) 722-4680
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 630 E. SUMMIT LEAD State SD 57754-1700
(Street, RR, or Box and City) (Zip Code)
2. Amount of water claimed _____ *CFS or _____ **GPM _____ ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply DEADWOOD CREEK
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County LAWRENCE
S1/2 of Section 29, T5N, R3E, BHM
5. County or counties where water will be used LAWRENCE
6. Annual period during which water is to be used Jan 1 to Dec 31
7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

See attached

STATE OF SOUTH DAKOTA)
County of Lawrence) SS

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

I, Todd Dux, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Applicant's signature Todd O. Dux

Subscribed and sworn to before me this 6th day of March 20 07



Max Main
Notary Public signature
My Commn Exp: May 15, 2008

**SOUTH DAKOTA
WATER PERMIT NO. 1886-1**

Date of first receipt of application March 8, 2007.

Date of return to applicant for corrections, amendments or changes March 9, 2007.

Date of receipt of corrected application April 10, 2007.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1886-1 to Homestake Mining of California, 630 E Summit, Lead SD 57754-1700 authorizing the relocation of a segment of Deadwood Creek subject to the following limitations, conditions and qualifications:

1. Water Permit No. 1886-1 authorizes the relocation of an approximate 700 feet segment of Deadwood Creek in the S ½ Section 29-T5N-R3E. Homestake had constructed the Sawpit Haul road from the Open Cut Mine to the sawpit Waste Rock Disposal Facility. The haul road crossed Hwy 14A and Deadwood Creek west of Central City. The structure included a tunnel through which the highway ran and a culvert designed to accommodate the creek flows. Homestake removed the haul road structure over the highway and plans to partially remove the structure over Deadwood Creek, thereby allowing the creek to flow through a channel that will be constructed around the remaining portion of the structure. The existing culvert will be plugged. Homestake will utilize water from the creek on a temporary basis for dust suppression during the removal project.
2. The project is for the purpose of reclamation at the Sawpit haul road.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 1886-1 is July 2, 2007.
5. The date from which applicant may claim right is March 8, 2007.
6. One-fifth of the construction is to be completed on or before January 2, 2010.
7. All construction is to be completed on or before July 2, 2012.
8. Water is to be put to beneficial use on or before July 2, 2016.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

WATER MANAGEMENT BOARD

By: Garland Erbele
Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUL 09 2007

date



F:\RM106\B\Barrick\0032576 Homestake\CAD\031607\0032576b202.dwg

SEC29 T5N R3E

SITE

LEGEND

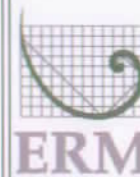
200 0 200 400
SCALE IN FEET



FIGURE 1	DESIGNED	MT
	DRAWN	MJ
	CHECKED	
	DATE	Apr 04, 2007
	TIME	3:01 pm

HOMESTAKE MINING COMPANY
LEAD, SOUTH DAKOTA

SITE MAP



Environmental Resources
Management
6455 S. Yosemite St.
Suite 900
Greenwood Village, Colorado 80111-4954
(303) 741-5050



REVISION	DESCRIPTION	DATE

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Hometown

Date 3/8/0, 20 07

RECEIVED OF Bennett, Main, Gubbrud 618 State St Belle Fourche SD 57717

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>1886-1</u> to Appropriate Water, to construct and to put water to beneficial use	150	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>1886-1</u>	50	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	200 00

No.

02982

By Laral Eberle
Chief Engineer

29

**Environmental
Resources
Management**

5950 South Willow Drive
Suite 200
Greenwood Village, CO 80111
(303) 741-5050
(303) 773-2624 (fax)

August 4, 2006

Mr. Mark Tieszen
Environmental Manager
Homestake Mining Company
630 East Summit Street
Lead, SD 57754



**RE: *Refined Layouts, Design, Material Handling Planning and Cost
Estimates, Partial Embankment Removal Option, Tech Span,
Homestake Mine, Lead , South Dakota***

Dear Mr. Tieszen:

As per our proposal dated July 24, 2006, ERM has prepared refined layouts and designs, materials handling plans and cost estimates for the partial removal option of the Tech Span embankment, in Lead, South Dakota. This report presents the results of that work.

REFINED LAYOUTS

The layouts and designs for the partial removal of the Tech Span embankment are presented on a series of figures attached to this report. The figures and the associated information presented thereon are as follows:

- ***Figure 1- Excavation Plan View:*** shows the extent of the excavation required to create a channel at the natural streambed elevation across the embankment area.
- ***Figure 2- Cross Sections of Excavation:*** shows several cross sections of the excavated channel.
- ***Figure 3- Channel Profile:*** shows a profile down the centerline of the excavated channel.
- ***Figure 4- Fill Areas:*** shows the areas where excavated material is to be placed.
- ***Figure 5- Fill Area Cross Section:*** shows a cross section through the fill area and the excavated channel.

The layouts resulted in an excavated volume of approximately 220,000 cubic yards as compared to approximately 350,000 cubic yards (plus the culvert) for total embankment removal. This partial embankment removal volume can be stored in the fill areas shown on the above referenced drawings assuming minimal swell occurs from excavation, placement and compaction of the material. Since the excavation is all in material previously placed as fill, this is considered a reasonable assumption.

Homestake Mining Company (Homestake) has indicated that they may want to use some of the excavated material in construction at the Blacktail Gulch. Although the exact amount required is not known at the time of this report, Homestake indicated that 35,000 to 40,000 cubic yards could be needed. If this amount of excavated material is taken to Blacktail Gulch, the fill area layout can be modified slightly to accommodate the lesser amount of fill.

For these layouts and plans, the existing culvert would remain in place and be abandoned. Plugging of the culvert at the entrance and exit and covering with fill should be an adequate remedy for this structure. Although eventual internal collapse can occur, such collapse should not impact the overall effectiveness of this partial removal plan.

REFINED DESIGNS

Principal design considerations and results are as follows:

- **Depth of Flow:** The 30-foot wide bottom width channel cut will convey normal and extreme flood flows at depths similar to the natural stream upstream and downstream of the channel. For example, flows from a 100 year frequency flood event (about 1600 cubic feet per second) will pass through the channel at a calculated depth of about 4.1 feet. No water backup is anticipated during flows for such an event.
- **Flow Velocities:** During small storm flow events, flow velocities are less than erosive for the fill materials in the embankment. (estimated at around 8 feet per second (fps)). However, during passage of large storms such as the 100 year storm event, velocities in the channel could be greater than these erosive velocities at around 10 fps.

To prevent undercutting of side slopes in such an event, some riprap protection appears to be required and has been considered in the cost estimates for this work. Erosion along the channel bottom, if any, would be the same as for the natural streambed upstream and downstream of the channel. In addition, it is anticipated that bedrock is near the channel bottom in this area of the stream. Thus, no riprapping is required.

- ***Cut and Fill Slope Stability:*** Although no formal slope stability analyses were conducted for this work (since geotechnical parameters for the fill were not available), the cut slopes and maximum fill slopes of 2 horizontal to 1 vertical (2H:1V) are considered stable based on observation at the site. The slopes of the current embankment fill are at 2H:1V or steeper and appear to have remained stable with no observed distress over many years. No ground water or seepage water (that can negatively impact stability) appears to be exiting the embankment at cut areas, and care will be taken not to cover, or control if required, seeps during fill operations.

Additional detailed designs may be required before final plans and specifications for construction are prepared. For example, the details and locations for riprap placement need to be determined. The details for the plugging of the culvert need to be specified. Additional geotechnical stability assessments in a more formal manner may be warranted. However, none of these additional design elements should change the overall concepts and layouts as set forth herein.

MATERIALS HANDLING BALANCE AND METHODS

As indicated above, the cut and fill are balanced for this plan. The amount of excavated materials can be placed in the designated fill areas and in the Blacktail Gulch area if required.

The method of construction will be at the discretion of the contractor bidding and performing the work. However, for this study and cost estimate, the methods and equipment that could feasibly be used were assessed. A combination of large hydraulic excavators and articulated off road haulers were used for method assessment and cost estimating. The hydraulic excavators can remove the embankment in layers,

starting primarily at the top and working downward. The excavators can direct load the haulers, which will then move to the designated fill area for placement. Placement would involve dumping, spreading with a bulldozer, and compacting with a tamping-foot self-propelled vibratory roller.

Selection of the hydraulic excavator size will determine the thickness of the layer that can be removed. For a CAT 345 (assumed for assessments and costing), a cut of 20 feet can easily be made. Cutting of about five such layers (100 feet +/- or Elevation 5100 at the west side of the embankment to Elevation 5000 at the entrance to the channel) will complete the project.

The articulate haulers are excellent pieces of equipment for climbing steep grades and maneuvering in tight areas as will be required for this project. The CAT 740 can be used to haul as much as 40 tons or more of excavated material. For the haul distances and grades involved, it is estimated that three such haulers can support a CAT 345 without much loss in efficiency or down time. If field operations warrant, a fourth hauler could be added to support the hydraulic excavator. This would reduce costs and time for construction.

To minimize construction time, and considering the large area of work, two teams of hydraulic excavators and haulers are considered in the methods and cost estimating. The only negative consideration in such an assumption is the potential difficulty in procuring such equipment in today's construction market. However, given sufficient time, such a fleet of equipment should be available for this work.

Haul roads from the excavation areas to the fill areas will be required. Cutting temporary haul roads into the sides of the existing embankment or natural valley slopes appears feasible. In addition, there will be more than enough fill materials to construct such roads. Slopes and lengths of haul roads will depend on the configurations of the excavation and filling operations at any given time and the observation of the performance of the haulers in the site conditions.

Equipment and methods for other parts of the work should be standard. For example, dozer and compactors for spreading and compacting the fill is a standard earth works operation. Placement of

the riprap also is easily accomplished with the hydraulic excavator, usually with the thumb attachment. Movement of excavated materials to Blacktail Gulch most likely will require on-road trucks, so this excavation and loading will require planning for work adjacent to the road.

COST ESTIMATES

Attachment A presents the detailed cost estimate prepared for this work. The first sheet in the spreadsheet package presents a summary of the cost estimate for the various work tasks and a total cost estimate. Without contingencies, this cost estimate shows a total of approximately \$1,330,000. A contingency of 10% is shown considering conservatism in the estimate for the extent of design and planning at this stage. Other costs not shown would involve the final design and permitting of the work and construction management and technical oversight required during construction.

The various work tasks and explanation of what is included in the cost estimate are as follows:

- ***Item I- Mobilization:*** includes moving 14 large pieces of earth moving equipment to the site, preparing health and safety plans, work plans and permitting, surveying to stake out the limits of the proposed cuts and fills and administrative time and expenses.
- ***Item II- Clearing, Grubbing and Site Preparation:*** includes removal of trees and brush in fill areas and on the embankment areas to be excavated, placement of silt fences and other control mechanisms to limit or prevent siltation in the creek during construction, and construction of initial haul roads.
- ***Item III - Excavation, Transportation and Placement (Adjacent to the Embankment):*** includes excavation with hydraulic excavators, transport in articulated off road haulers, spreading with bulldozers and compaction with vibratory compactors of about 185,000 cubic yards. The estimated costs assume excavation and placement in fill areas of about 2500 cubic yards of material per day for a hydraulic-excavator-hauler team. For two such teams, this is about 5,000 cubic yards per day. This is considered conservative. With a well planned operation, the

production could be greater and the costs less. For the cost estimate at this stage, however, the projected production rate is considered appropriate.

- **Item IV- Excavation and Transportation (to Blacktail Gulch):** includes the excavation, loading and transportation of about 35,000 cubic yards of material to Blacktail Gulch. Excavation would still be by hydraulic excavator, but direct loading would be into on-road trucks for the trip to Blacktail Gulch. In order to get the on-road trucks on site and loaded, the excavated material was assumed to be located near the main highway. Placement and compaction costs were not included since it is not known what the material will be used for. Such final costs should be included in the estimate for that construction.
- **Item V- Riprap Supply and Placement:** includes procurement, delivery and placement of riprap from the local quarry. The size of riprap was determined in part by the projected flow velocities in the channel system and partly by the availability of rock at the quarry. A Class C rock seems appropriate. This rock is well graded with a maximum size of about 27 inches. The quoted price was about \$25 per ton FOB the quarry. The rock would be placed in the channel at critical protection areas (e.g., at the toe of slope of the cut fill). A total of about 1,000 tons was included in the estimate.
- **Item VI- Culvert and Streambed Treatment:** includes an allowance of about \$35,000 (cost) for plugging the culvert and doing a minimal amount of creek bed grading or low flow channel construction. Since these designs are not complete, a detailed estimate cannot be prepared. However, the allowance amount should be adequate to perform these functions.
- **Item VII -Hydro Mulching and Seeding:** includes covering of about 14 acres including all areas disturbed by the construction as well as the surface of the fill areas. The unit price used in the estimate is considered minimal for this type of work, but is not based on quoted values from local suppliers.

This estimate is considered to be an engineers' construction cost estimate or a "check estimate." To refine the estimate, it is recommended that an earth moving contractor be asked to review the

drawings as presented herein and provide what they may consider to be a reasonable price for performing the work. The prices received can then be "checked" using the enclosed estimate to define major differences (if any) and the causes for those differences. This was not done for this report given the short timeframe for the work.

CONCLUSIONS AND OBSERVATIONS

The costs for this Tech Span Option are driven primarily by the amount of excavation estimated. It is larger than previous rough estimates of quantities, but is still far less than the quantities that would be involved in complete removal of the embankment. The cost estimate is also based on conservative assumption/projections of production rates for cut and fill operations. However, given the roughness of the terrain and the unknown factors still present about the work, these are considered appropriate at this time.

If Homestake elects to proceed with this option, the design has to be finalized, a set of Project Construction Documents prepared, methods of contracting selected, bids solicited and the other preconstruction elements performed. The work set forth herein is, however, a valuable first step in achieving that end goal.

Sincerely,
ERM-Rocky Mountain, Inc.



Michael J. Taylor
Partner

enclosures:

cc: Al Trippel
Patty Corbetta

Figure 1
Excavation Plan View

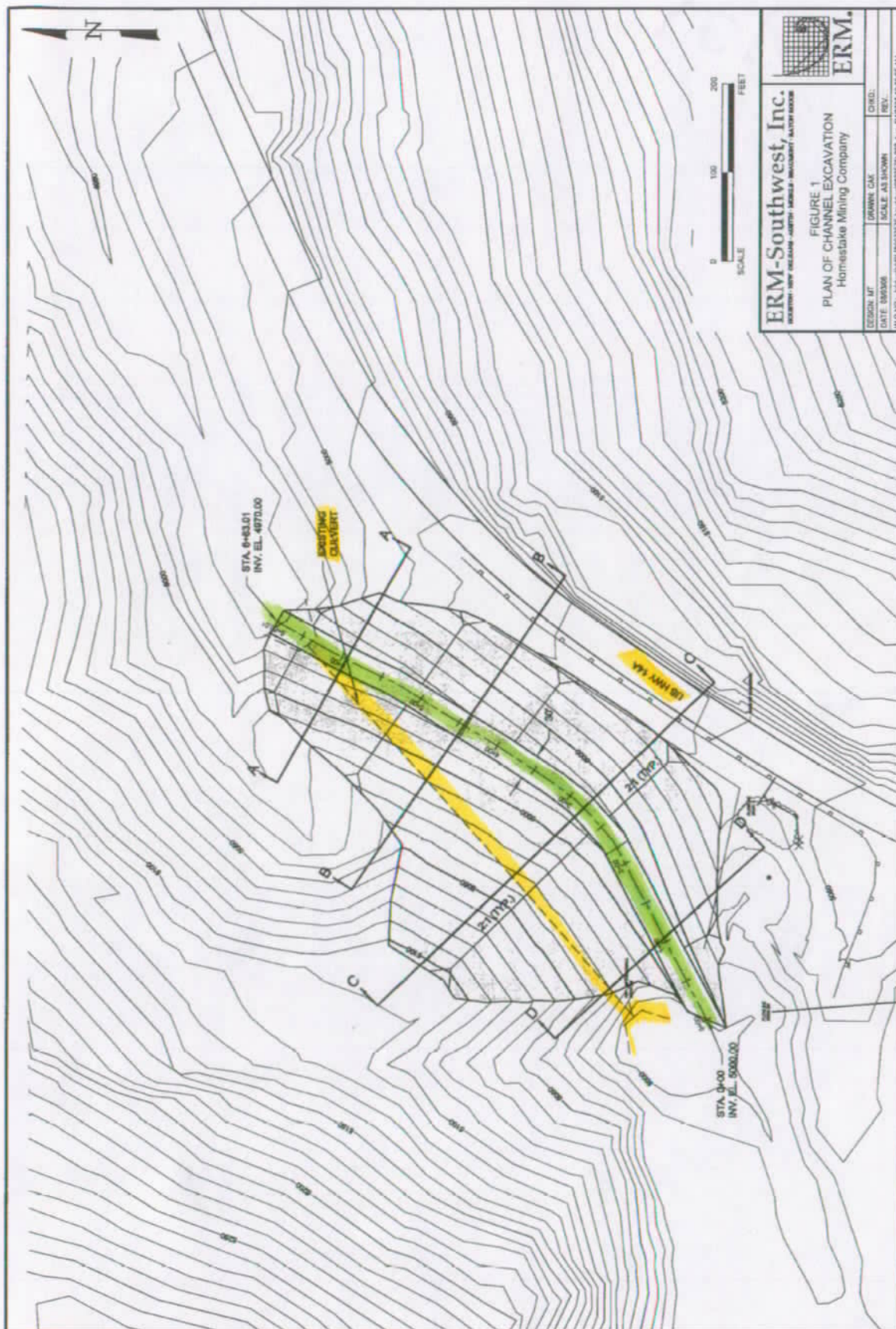
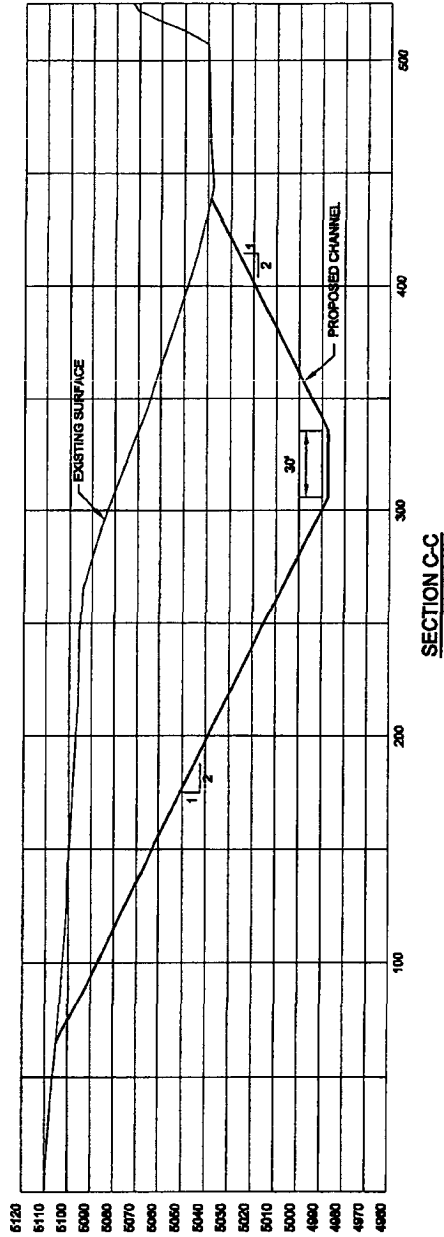
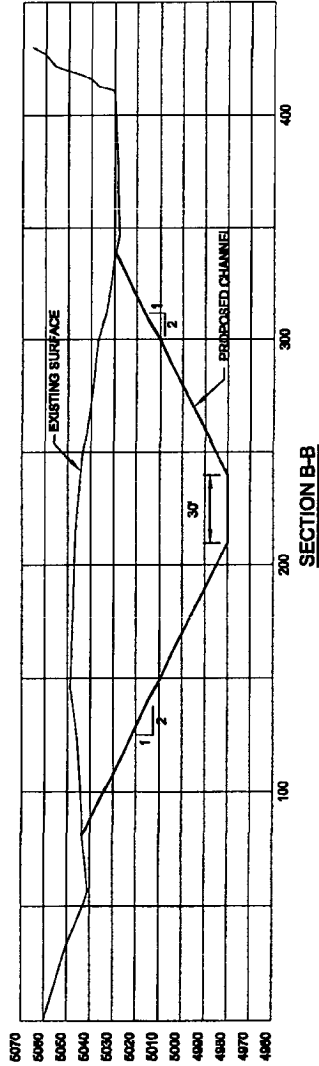
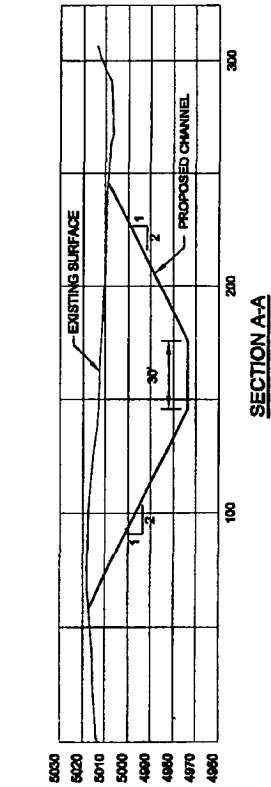
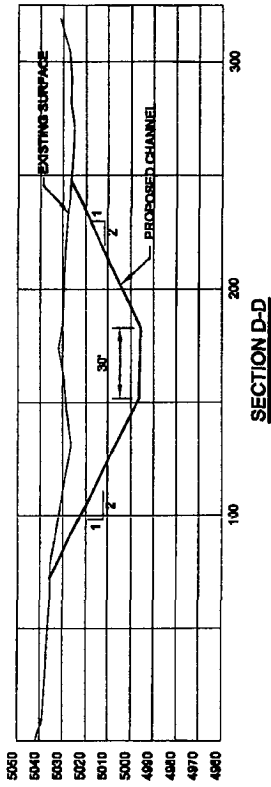
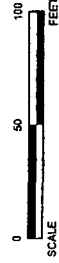


Figure 2
Cross Sections of Excavation



NOTE: RIPRAP TO BE PLACED AT TOES OF SLOPES AND OTHER KEY AREAS TO PREVENT EROSION FOR FLOWS DURING 100 YEAR FREQUENCY STORM PASSAGE.



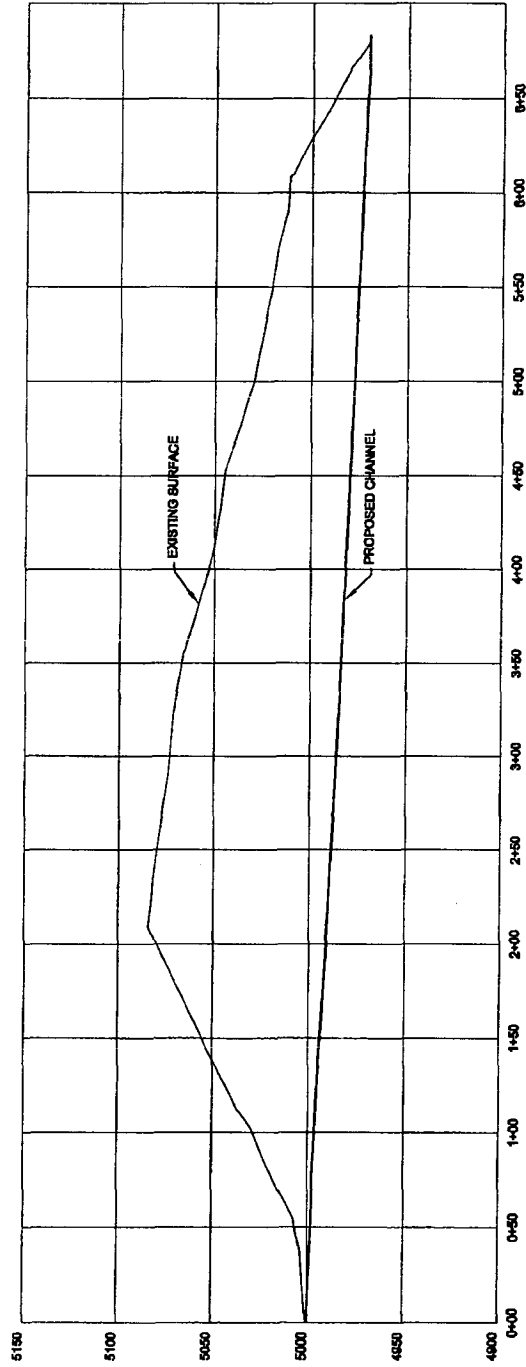
ERM-Southwest, Inc.
INCORPORATED - NEW ORLEANS - LAFAYETTE - JACKSON - BIRMINGHAM - ATLANTA - MOBILE

ERM

FIGURE 2
CHANNEL CROSS SECTIONS
 Homestake Mining Company

DESIGN: MT	DRAWN: CJK	CHKD:
DATE: 06/30/08	SCALE: AS SHOWN	REV:
W.D.NO.: 14349605UP0031278 (model:0031278021.dwg, 04/2008 11:09:51 AM)		

Figure 3
Channel Profile



PROFILE - CHANNEL CENTERLINE



ERM-Southwest, Inc.
HOUSTON - NEW ORLEANS - AUSTIN - DENVER - MIAMI - MOBILE - NASHVILLE - SALT LAKE CITY - SAN ANTONIO - TAMPA - WASHINGTON, D.C.



FIGURE 3
LONGITUDINAL PROFILE
THROUGH CHANNEL
Homestake Mining Company

DESIGN: MT	DRAWN: CM	CHECK:
DATE: 08/03/04	SCALE: AS SHOWN	REV:
W.O. NO.: N:\env\0501\00325716.mxd\dwg\00325716.dwg 8/4/2004 11:11:25 AM		

Figure 4
Fill Areas



Figure 5
Fill Area Cross Section



0 60 120 FEET
SCALE

ERM-Southwest, Inc.

FIGURE 5

CROSS SECTION THROUGH

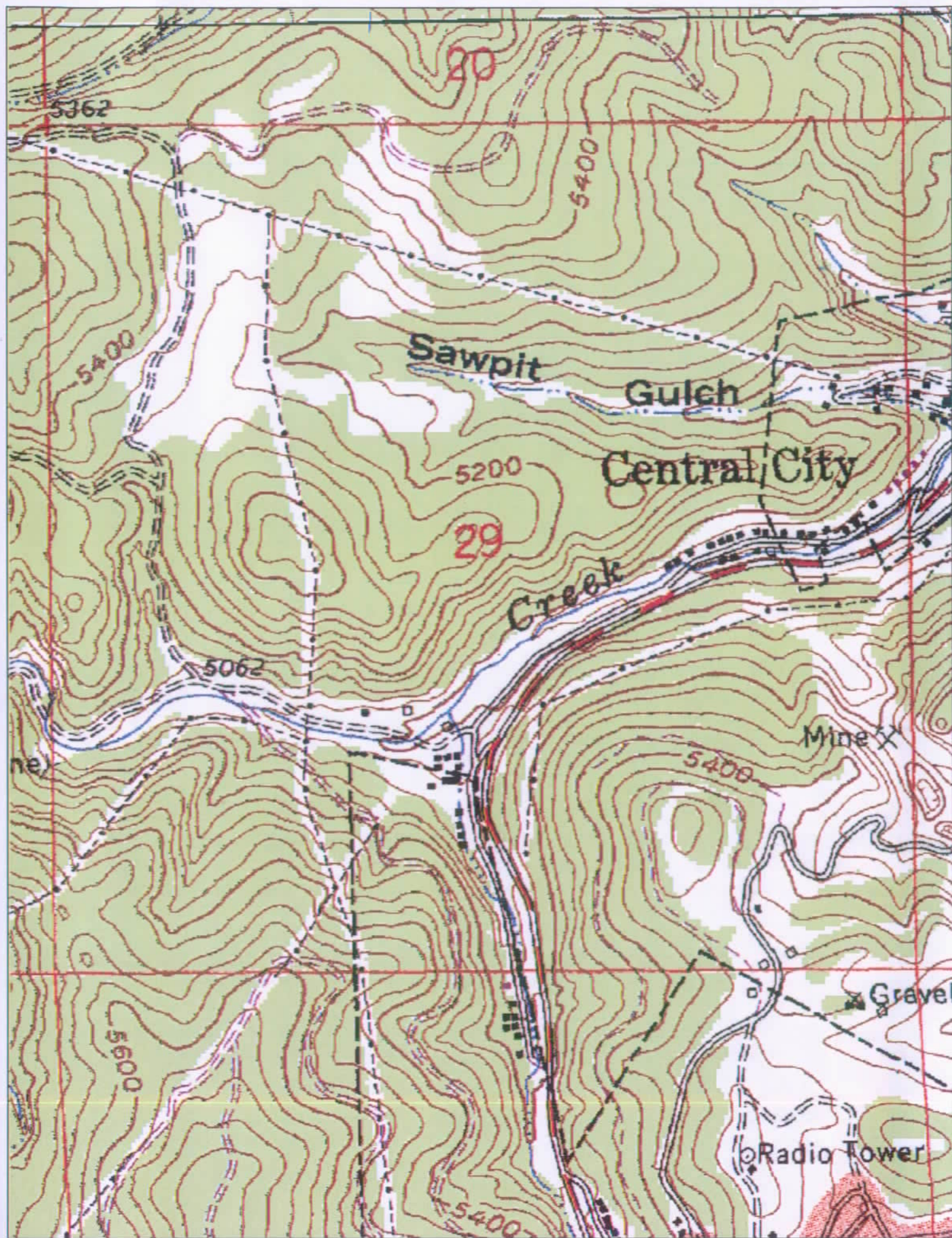
FILL AREA AND CHANNEL

DESIGN: MT	DRAWN: CAK	CHKD:
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DATE: 08/03/06	SCALE: AS SHOWN	REV.:
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W.O.NO.: N:\dw\1\N6L P0032576-1-mchdw\0032576b203.dwg, 8/4/2006 9:48:09 AM





**LAW OFFICES OF
BENNETT, MAIN & GUBBRUD**
A PROFESSIONAL CORPORATION
618 STATE STREET
BELLE FOURCHE, SOUTH DAKOTA 57717-1489
TEL (605) 892-2011
FAX (605) 892-4084
EMAIL: bellelaw@bellelaw.com

MAX MAIN*
DWIGHT A. GUBBRUD*
WADE NYBERG*
*LICENSED IN SOUTH DAKOTA AND WYOMING

EST. 1908

RETIRED
DONN BENNETT

March 7, 2007

RECEIVED
MAR - 8 2007
WATER RIGHTS
PROGRAM

DENR - Water Rights Program
Attn: Eric Gronlund
Joe Foss Bldg., 523 E. Capitol
Pierre, SD 57501-3181

**RE: Homestake Water Permit Application for purposes of relocating
Deadwood Creek; Our File No. 2365.129007.**

Dear Eric:

Enclosed are an original and one copy of Form 2, an application for water permit by Homestake, along with supporting documents. This application relates to the relocation of a portion of Deadwood Creek. Also enclosed is a check payable to the order of DENR in the amount of \$200 as payment of the filing fee and final inspection fee.

It is necessary for Homestake to relocate the indicated portion of Deadwood Creek to facilitate the Tech Span partial removal.

Please let me know if you have questions, or require further information.

Sincerely,

BENNETT, MAIN & GUBBRUD, P.C.

Max Main

Max Main

MM/ra
Encs

cc (w/Enc.): Mark Tieszen



March 9, 2007

Max Main
Bennett, Main & Gubbrud
618 State St
Belle Fourche SD 57717-1489

RE: Homestake Mining Water Permit Application

Dear Mr. Main:

Thank you for submitting the *Application for a Permit to Appropriate Water* to relocate a portion of Deadwood Creek bed. In order to complete the application the following is required.

- Enclosed is the map submitted with the application. The map needs to reference a government section corner or quarter corner.
- Also, the map must be signed by one of the following: Registered Land Surveyor, Registered Professional Engineer or by any other government employee who normally prepares maps as a part of his assigned duties.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

enclosure

c: Todd Duex

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

LAW OFFICES OF
BENNETT, MAIN & GUBBRUD
A PROFESSIONAL CORPORATION
618 STATE STREET
BELLE FOURCHE, SOUTH DAKOTA 57717-1489
TEL (605) 892-2011
FAX (605) 892-4084
EMAIL: bellelaw@bellelaw.com

MAX MAIN*
DWIGHT A. GUBBRUD*
WADE NYBERG*
*LICENSED IN SOUTH DAKOTA AND WYOMING

EST. 1908

RECEIVED
APR 10 2007
WATER RIGHTS
PROGRAM

RETIRED
DONN BENNETT

April 9, 2007

Department of Environment & Natural Resources
Water Rights Program
Attn: Karen Schlaak
Joe Foss Building - 523 E. Capitol
Pierre, SD 57501-3182

**RE: Homestake - Water Permit Application;
Our File No. 2365.129.007.**

Dear Karen:

Enclosed is the revised map for the above-referenced application.

Thank you for your assistance, and please advise if you have any questions.

Sincerely,

BENNETT, MAIN & GUBBRUD, P.C.



Max Main

MM/njo

Enc.

cc: HMC- Mark Tieszen (Letter Only)

Tech Span Partial Removal Description of Project

As part of its Open Cut Mining Operation, Homestake constructed the Sawpit Haul Road from the Open Cut Mine to the Sawpit Waste Rock Disposal Facility. The haul road crossed Hwy. 14A and Deadwood Creek west of Central City. The haul road passed over the highway and creek on a "Tech Span" structure. The structure included a tunnel through which the highway ran and a culvert designed to accommodate the creek flows.

Homestake has removed the structure over the highway and has agreed to partially remove the structure over Deadwood Creek, thereby allowing the creek to flow through a channel that will be constructed around the remaining portion of the structure (see attached design drawing).

The removed material will be placed along the north hillside upstream and downstream of the remaining structure. The existing culvert will be plugged.

Homestake is also planning to utilize water from the creek on a temporary basis for dust suppression during the removal project.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1886-1, Homestake Mining of California**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 1886-1, Homestake Mining of California, c/o Todd Duex, 630 East Summit, Lead SD 57754-1700.

The Chief Engineer is recommending APPROVAL of Application No. 1886-1 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualification:

See report on application for additional information.

Garland Erbele, Chief Engineer
June 1, 2007

REPORT ON APPLICATION NO. 1886-1

For Homestake Mining of California

May 29, 2007

Application 1886-1 proposes to relocate an approximate 700 foot segment of Deadwood Creek in the S½ Section 29, T5N-R3E to facilitate mine reclamation operations in the area. The proposed project is located approximately ½ mile west of Central City in Lawrence County

REVIEW OF PROPOSED PROJECT

As part of its Open Cut Mining Operation, Homestake constructed the Sawpit Haul Road from the Open Cut Mine to the Sawpit Waste Rock Disposal Facility. The haul road crossed Hwy. 14A and Deadwood Creek west of Central City. The structure included a tunnel through which the highway ran and a culvert designed to accommodate the creek flows. Homestake removed the haul road structure over the highway and plans to remove a portion of the structure over Deadwood Creek, thereby allowing the creek to flow through a channel around the remaining portion of the structure. The existing culvert will be plugged. Homestake is also planning to utilize water from the creek on a temporary basis for dust suppression during the removal project.

WATER SOURCE AND EXISTING WATER PERMITS/RIGHTS

There are no water rights on Deadwood Creek that could be affected by the proposed project.

The proposed project was designed by Environmental Resources Management of Greenwood Village, Colorado. Review of principal design considerations such as the proposed channel location, depth of flow and flow velocities indicate that the relocated channel will not alter the hydrology or the environment of Deadwood Creek in a significant way during and after the proposed project.

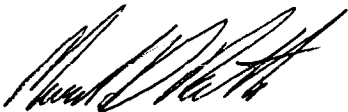
CONCLUSIONS

1. Application 1886-1 proposes to relocate a segment of Deadwood Creek west of Central City, SD to facilitate mine reclamation operations in the area.
2. There are no water rights on Deadwood Creek that could be affected by the proposed project.
3. Review of principal design considerations that the relocated channel will not alter the hydrology or the environment of Deadwood Creek in a significant way.



Aaron R. Tieman
Natural Resources Engineer

Approved by



Mark D. Rath
Natural Resources Engineer Specialist

AFFIDAVIT OF PUBLICATION

RECEIVED

STATE OF SOUTH DAKOTA
COUNTY OF LAWRENCE

JUN 22 2007

WATER RIGHTS
PROGRAM

Teri Adler, being duly sworn, says: That the *Lawrence County Journal* is, and during all times hereafter mentioned, was a legal newspaper as defined in SDCL 17-2-2, as amended, published at Spearfish, Lawrence County, South Dakota, by Lee Enterprises; that affidavit is and, during all of said times, was employed as Customer Service Representative by the publisher of such newspaper and has personal knowledge of the facts stated in the affidavit; that the notice, order or advertisement, a printed copy of which is attached, was published in said newspaper for successive issues, bearing the following dates:

June 13,	200	7	200
June 20,	200	7	200
	200		200
	200		200
	200		200
	200		200

that the full amount of the fee charged for publishing the same, to-wit, the sum of \$ 51.43, insures solely to the benefit of the publisher of said newspaper: that no agreement or understanding for the division of the fee has been made with any person, and that no part of the fee has been agreed to be paid to any other person.

Teri Adler
Customer Service Rep

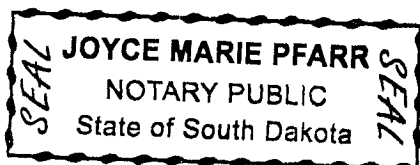
Subscribed and sworn to before me this

20 day of June, 2007

Joyce Marie Pfarr

My commission expires. 08/14/2012

Notary Public, South Dakota



Account No. 60001465

Total Amount \$ 51.43

**NOTICE OF APPLICATION NO.
1886-1 to Appropriate Water**

Notice is given that Homestake Mining of California, 630 E Summit, Lead SD 57754-1700 has filed an application for a water permit to relocate an approximate 700 foot segment of Deadwood Creek in the S 1/2 Section 29-T5N-R3E. Homestake had constructed the Sawpit Haul road from the Open Cut Mine to the sawpit Waste Rock Disposal Facility. The haul road crossed Hwy 14A and Deadwood Creek west of Central City. The structure included a tunnel through which the highway ran and a culvert designed to accommodate the creek flows. Homestake removed the haul road structure over the highway and plans to partially remove the structure over Deadwood Creek, thereby allowing the creek to flow through a channel that will be constructed around the remaining portion of the structure. The existing culvert will be plugged. Homestake is also planning to utilize water from the creek on a temporary basis for dust suppression during the removal project. Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1886-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on these applications, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition. Any person interested in opposing or supporting this application or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by July 2, 2007. The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

June 5, 2007

Lawrence County Journal
376 Main Ste A
Deadwood SD 57732

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 1886-1 to Appropriate Water to be published twice. Please publish the first notice on June 13, 2007 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Homestake Mining of California, 630 E Summit, Lead SD 57754(Ph # 605-722-4680).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

No. 1886-1

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of June 5, 2007 enclosing Notice to Appropriate Water by Application No. 1886-1 which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.

June 5, 2007

Homestake Mining of California
630 E Summit
Lead SD 57754

Dear Sir:

Water Permit Application No. 1886-1 for relocation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Lawrence County Journal printed at Deadwood SD (Ph # 605-578-3305). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application is enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the applications.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

c: Max Main, Bennett, Main & Gubbrud, 618 State St., Belle Fourche SD 57717-1489

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

Instruction to Newspaper - Publish first Notice on June 13, 2007 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 1886-1 to Appropriate Water

Notice is given that Homestake Mining of California, 630 E Summit, Lead SD 57754-1700 has filed an application for a water permit to relocate an approximate 700 foot segment of Deadwood Creek in the S ½ Section 29-T5N-R3E.

Homestake had constructed the Sawpit Haul road from the Open Cut Mine to the sawpit Waste Rock Disposal Facility. The haul road crossed Hwy 14A and Deadwood Creek west of Central City. The structure included a tunnel through which the highway ran and a culvert designed to accommodate the creek flows. Homestake removed the haul road structure over the highway and plans to partially remove the structure over Deadwood Creek, thereby allowing the creek to flow through a channel that will be constructed around the remaining portion of the structure. The existing culvert will be plugged. Homestake is also planning to utilize water from the creek on a temporary basis for dust suppression during the removal project.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1886-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on these applications, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by July 2, 2007.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

JUL 09 2007

Homestake Mining of California
c/o Todd Duex
630 E Summit
Lead SD 57754-4680

Dear Mr. Duex:

Enclosed is Water Permit No. 1886-1 authorizing reclamation at the Sawpit haul road.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after the project has been completed. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

c: Max Main, Bennett, Main & Gubbard, 618 State St, Belle Fourche SD 57717-1489

1886-1

HOMESTAKE MINING COMPANY
630 E. Summit Street
Lead, South Dakota 57754-1700
605-584-GOLD (4653)

August 22, 2007

Mr. Steven M. Pirner, P.E.
Secretary
SD Dept. of Environment and Natural Resources
523 East Capitol / Joe Foss Building
Pierre, SD 57501-3181

**Re: Homestake Mining Company and LAC Minerals (USA) LLC
Notification of Change of Address**

Dear Mr. Pirner:

Homestake Mining Company and LAC Minerals are hereby submitting this notification of a change of address. Homestake and LAC will be moving to the Blacktail Offices adjacent to the Blacktail Water Treatment Plant in Central City effective September 1, 2007. The new address is:

Homestake Mining Co.	LAC Minerals
11457 Bobtail Gulch Street	or 11457 Bobtail Gulch Street
Central City, SD 57754	Central City, SD 57754

Please send all correspondence for the Homestake Mining Company or LAC Minerals to the new address beginning September 1st.

Sincerely,



Todd A. Duex
Closure Manager

cc: Mr. Garland Erbele, P.E.
Ms. Jeanne Goodman, P.E.
Ms. Vonni Kallemeyn
Mr. Bill Markley
Mr. Tim Tollefsrud
Mr. Bob Townsend, P.G.

1886-1
RECEIVED
OCT 15 2012
WATER RIGHTS
PROGRAM

**NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE**

Date October 8, 2012

TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

Homestake Mining Company
(name)

11457 Bobtail Gulch Street
(address)

Central City, South Dakota 57754
(city, state, zip)

(605) 722-4680
(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 1886-1 states that the water use system is to be constructed by

July 2, 2012
(date)

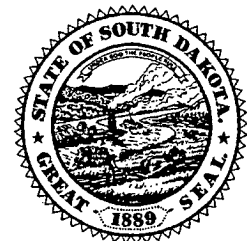
, and water is to be put to beneficial use by July 2, 2016
(date)

The water use system was completed on July 31, 2010
(date)

Applying the water to beneficial use was completed on June 8, 2010
(date)

You may schedule an investigation so that the water license may be issued.

Todd A. Dumas
(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

October 17, 2012

1886-1
1908-1

Homestake Mining Company
11457 Bobtail Gulch St
Central City SD 57754

Dear Sirs:

I am writing to acknowledge receipt of the "Notice of Completion of Works" forms that you sent in to let us know that you are completed with the systems authorized under Water Permit Nos. 1886-1 and 1908-1.

The systems are now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between completion of the projects and the staff inspection has no bearing on the water permits.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us



1886-1
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

OCT 13 2017

1815-1
1886-1
1886A-1

Jeff Burich
Homestake Mining Company
11457 Bobtail Gulch St
Central City SD 57754

Dear Mr. Burich:

Enclosed are Water License Nos. 1815-1 and 1886A-1. They are the final water right documents completing the process of obtaining Water Rights. Included with each license is a map prepared by the staff engineer who conducted the field investigation.

As long as you use the water beneficially, as stated in the Water Licenses, State Water Laws provide that you have a continuing right to use the water.

Sincerely,


Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

Note: Upon licensing, the applicable portions of Water Permit No. 1886-1 were incorporated into Water License No. 1886A-1.