

# PERMIT CHANGE TRACKING FORM

<b>DATE RECEIVED</b>	<i>3/9/94</i>	<b>PERMIT NUMBER</b>	<i>ACT/007/007</i>
<b>Title of Proposal:</b>	<i>Dewatering Borehole</i>	<b>PERMIT CHANGE #</b>	<i>94c</i>
<b>Description:</b>		<b>PERMITTEE</b>	<i>SLC</i>
		<b>MINE NAME</b>	<i>Sunnyside Mine</i>

	DATE DUE	DATE DONE	RESULT	
			<input type="checkbox"/> ACCEPTED	<input type="checkbox"/> REJECTED
<input type="checkbox"/> 15 DAY INITIAL RESPONSE TO PERMIT CHANGE APPLICATION				
<input type="checkbox"/> Notice of Review Status of proposed permit change sent to the Permittee.			<b>Permit Change Classification</b>	
<input type="checkbox"/> Request additional review copies prior to Division/Other Agency review.			<input type="checkbox"/> Significant Permit Revision	
<input type="checkbox"/> Notice of Approval of Publication. (If change is a Significant Revision.)			<input type="checkbox"/> Permit Amendment	
<input type="checkbox"/> Notice of request to modify proposed permit change prior to approval.			<input type="checkbox"/> Incidental Boundary Change	

REVIEW TRACKING	INITIAL REVIEW		MODIFIED REVIEW		FINAL REVIEW AND FINDINGS	
DOGM REVIEWER	DUE	DONE	DUE	DONE	DUE	DONE
<input type="checkbox"/> Administrative _____						
<input type="checkbox"/> Biology _____						
<input type="checkbox"/> Engineering _____						
<input type="checkbox"/> Geology _____						
<input type="checkbox"/> Soils _____						
<input type="checkbox"/> Hydrology _____						
<input type="checkbox"/> Bonding _____						
<input type="checkbox"/> AVS Check _____						

COORDINATED REVIEWS	DUE	DONE	DUE	DONE	DUE	DONE
<input type="checkbox"/> OSMRE						
<input type="checkbox"/> US Forest Service						
<input type="checkbox"/> Bureau of Land Management						
<input type="checkbox"/> US Fish and Wildlife Service						
<input type="checkbox"/> US National Parks Service						
<input type="checkbox"/> UT Environmental Quality						
<input type="checkbox"/> UT Water Resources						
<input type="checkbox"/> UT Water Rights						
<input type="checkbox"/> UT Wildlife Resources						
<input type="checkbox"/> UT State History						
<input type="checkbox"/> Other						

<input type="checkbox"/> Public Notice/Comment/Hearing Complete (If the permit change is a Significant Revision)	<input type="checkbox"/> Permit Change Approval Form signed and approved effective as of this date. <input type="checkbox"/> Permit Change Denied.
<input type="checkbox"/> Copies of permit change marked and ready for MRP.	<input type="checkbox"/> Notice of <input type="checkbox"/> Approval <input type="checkbox"/> Denial to Permittee.
<input type="checkbox"/> Special Conditions/Stipulations written for approval.	<input type="checkbox"/> Copy of Approved Permit Change to File.
<input type="checkbox"/> TA and CHIA modified as required.	<input type="checkbox"/> Copy of Approved Permit Change to Permittee.
<input type="checkbox"/> Permit Change Approval Form ready for approval.	<input type="checkbox"/> Copies to Other Agencies and Price Field Office.

## PERMIT AMENDMENT APPROVAL

Title:	PERMIT NUMBER:
Description:	PERMIT CHANGE #:
	MINE:
	PERMITTEE:

WRITTEN FINDINGS FOR PERMIT APPLICATION APPROVAL		YES, NO or N/A
1. The application is complete and accurate and the applicant has complied with all the requirements of the State Program.		
2. The proposed permit area is not within an area under study or administrative proceedings under a petition, filed pursuant to R645-103-400 or 30 CFR 769, to have an area designated as unsuitable for coal mining and reclamation operations, unless:  A. The applicant has demonstrated that before January 4, 1977, substantial legal and financial commitments were made in relation to the operation covered by the permit application, or  B. The applicant has demonstrated that the proposed permit area is not within an area designated as unsuitable for mining pursuant to R645-103-300 and R645-103-400 or 30 CFR 769 or subject to the prohibitions or limitations of R645-103-230.		
3. For coal mining and reclamation operations where the private mineral estate to be mined has been severed from the private surface estate, the applicant has submitted to the Division the documentation required under R645-301-114.200.		
4. The Division has made an assessment of the probable cumulative impacts of all anticipated coal mining and reclamation operations on the hydrologic balance in the cumulative impact area and has determined that the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area.		
5. The operation would not affect the continued existence of endangered or threatened species or result in destruction or adverse modification of their critical habitats, as determined under the Endangered Species Act of 1973 (16 U.S.C. 1531 et.seq.).		
6. The Division has taken into account the effect of the proposed permitting action on properties listed on and eligible for listing on the National Register of Historic Places. This finding may be supported in part by inclusion of appropriate permit conditions or changes in the operation plan protecting historic resources, or a documented decision that the Division has determined that no additional protection measures are necessary.		
7. The Applicant has demonstrated that reclamation as required by the State Program can be accomplished according to information given in the permit application.		
8. The Applicant has demonstrated that any existing structure will comply with the applicable performance standards of R645-301 and R645-302.		
9. The Applicant has paid all reclamation fees from previous and existing coal mining and reclamation operations as required by 30 CFR Part 870.		
10. The Applicant has satisfied the applicable requirements of R645-302.		
11. The Applicant has, if applicable, satisfied the requirements for approval of a long-term, intensive agricultural postmining land use, in accordance with the requirements of R645-301-353.400.		

SPECIAL CONDITIONS OR STIPULATIONS TO THE PERMIT AMENDMENT APPROVAL		YES	NO
1. Are there any variances associated with this permit amendment approval? If yes, attach.			
2. Are there any special conditions associated with this permit amendment approval? If yes, attach.			
3. Are there any stipulations associated with this permit amendment approval? If yes, attach.			

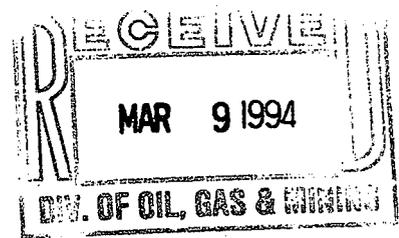
**The Division hereby grants approval for Permit Amendment to the Existing Permit by incorporation of the proposed changes described herein and effective the date signed below. All other terms and conditions of the Existing Permit shall be maintained and in effect except as superseded by this Permit Amendment.**

Signed \_\_\_\_\_  
 Director, Division of Oil, Gas and Mining

\_\_\_\_\_ EFFECTIVE DATE

# Sunnyside Coal Company

Operations • Highway 123 • P.O. Box 99 • Sunnyside, Utah 84539



March 4, 1994

Ms. Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil, Gas & Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

94C

ACT 1007/007 #2

Copy to Grand Bend file

Dear Pam:

Re: Application for Permit Change Adding A De-Watering Borehole

Enclosed please find an Application for Permit Change that will incorporate a proposed De-Watering Borehole into SCC's current PAP.

Sunnyside Cogeneration Associates has a need for this facility to supply water to the power plant. If this facility is installed while the mine is operating, it is a means of de-watering the mine and needs to be in SCC's PAP. If the mine is not active, has been sealed, and is not discharging water via its pumps, then this should not be part of SCC's permit application.

Please feel free to contact me at any time if you have need of any additional information.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gary E. Gray".

Gary E. Gray  
Chief Engineer

GEG:th

Enclosures

**Corporate Offices**  
The Registry  
1113 Spruce Street  
Boulder, CO 80302  
303-938-1506  
FAX: 303-938-5050

**Operations**  
Highway 123  
P.O. Box 99  
Sunnyside, UT 84539  
801-888-4421  
FAX: 801-888-2581

# APPLICATION FOR PERMIT CHANGE

Title of Change:

Mine De-Watering Borehole

Permit Number: ACT / 007 / 007

Mine: Sunnyside

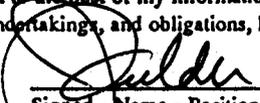
Permittee: Sunnyside Coal Company

Description, include reason for change and timing required to implement: Sunnyside Coal and Sunnyside Cogeneration have agreed to de-water the underground mine workings to each other's benefit. A borehole located over the deepest point of the mine is to be drilled and a submersible pump installed. The mine water is then delivered into a pipe line for use by SCA at the power plant.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 1. Change in the size of the Permit Area? _____ acres <input type="checkbox"/> increase <input type="checkbox"/> decrease.                    |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 2. Change in the size of the Disturbed Area? <u>1.5</u> acres <input checked="" type="checkbox"/> increase <input type="checkbox"/> decrease. |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 3. Will permit change include operations outside the Cumulative Hydrologic Impact Area?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 4. Will permit change include operations in hydrologic basins other than currently approved?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 5. Does permit change result from cancellation, reduction or increase of insurance or reclamation bond?                                       |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 6. Does permit change require or include public notice publication?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 7. Permit change as a result of a Violation? Violation #  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 8. Permit change as a result of a Division Order? D.O.#   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 9. Permit change as a result of other laws or regulations? Explain:   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 10. Does permit change require or include ownership, control, right-of-entry, or compliance information?                                      |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 11. Does the permit change affect the surface landowner or change the post mining land use?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 12. Does permit change require or include collection and reporting of any baseline information?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 13. Could the permit change have any effect on wildlife or vegetation outside the current disturbed area?                                     |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 14. Does permit change require or include soil removal, storage or placement?   |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 15. Does permit change require or include vegetation monitoring, removal or revegetation activities?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 16. Does permit change require or include construction, modification, or removal of surface facilities?                                       |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 17. Does permit change require or include water monitoring, sediment or drainage control measures?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 18. Does permit change require or include certified designs, maps, or calculations?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 19. Does permit change require or include underground design or mine sequence and timing?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 20. Does permit change require or include subsidence control or monitoring?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 21. Have reclamation costs for bonding been provided or revised for any change in the reclamation plan?                                       |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 22. Is permit change within 100 feet of a public road or perennial stream or 500 feet of an occupied dwelling?                                |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 23. Is this permit change coal exploration activity <input type="checkbox"/> inside <input type="checkbox"/> outside of the permit area?      |

Attach 3 complete copies of proposed permit change as it would be incorporated into the Mining and Reclamation Plan.

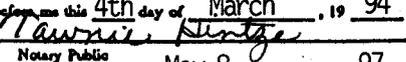
I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

 3/4/94  
 Signed - Name - Position - Date

Received by Oil, Gas & Mining

MAR 9 1994

Subscribed and sworn to before me this 4th day of March, 19 94.

  
 Notary Public

My Commission Expires: May 8, 19 97  
 Attest: STATE OF Utah  
 COUNTY OF Carbon


**TAWNIE HINTZE**  
 NOTARY PUBLIC • STATE OF UTAH  
 P.O. BOX 88  
 HWY. 123 WESTMOR CYN  
 SUNNYSIDE, UT 84394  
 COMM. EXP. 5-8-97

ASSIGNED PERMIT CHANGE NUMBER



3.2.9B Dewatering Borehole

A Dewatering Borehole is scheduled for construction during 1994. The location of the borehole, temporary drilling pad, pipeline and topsoil storage pile is shown on Plates III-1Dj and k.

The purpose of the borehole is to allow SCA to pump the water from the mine and deliver the water via pipeline to the powerplant reservoir for power generation use.

The borehole will be located on the surface in an area that is undisturbed (See Plate III-20). Sediment control for the drill pad area (approximately 0.7 acres) will use alternative, BTCA primary sediment control practices. These consist of undisturbed diversion ditches/berms and a silt fence and are shown on Plate III-1Dk. The temporary drill pad area will be covered with rock during use. After the borehole is drilled and the pumps installed the area will be reclaimed and revegetated so that the area will also use a vegetative cover to control sediment.

In preparation for the construction of the temporary pad, 6" of topsoil will be removed and a topsoil storage pile will be established as shown on Plate III-1Dk and Figure III-17. The capacity of the topsoil storage area is 521 cu. yds. Removal of 6" of topsoil will result in storage of 458 cu. yds. Most of the topsoil will be stored for no more than 6 months, after which time it will be redistributed in conjunction with the reclamation of the drill pad. The remaining portion will be used when the wellhead is reclaimed. The topsoil pile will be established and maintained in accordance with established Division guidelines, and as outlined in section 3.5.1.2. As an additional soil protection and sediment control measure, a berm which will be capable of containing runoff from a 100 yr. 6 hr. event will be established around the topsoil pile.

The borehole will discharge into 001 Mine Water Pond or into the old 10 inch culinary line via a 6 inch pipeline as shown on Plate III-1Dk. The pipeline corridor is shown as disturbed area consisting of 3,400 feet length, 10 foot wide (0.8 acres).

The borehole itself will be cased for its entire length. Since the purpose is to supply SCA with water the borehole has a post mining land use and will not be reclaimed. SCA is responsible for the borehole and its operations and maintenance.

## Chapter III

### 3.2.10 Permit Term Disturbance Area

The Sunnyside permit contains 14,533 acres. The permit boundary is delineated on Plate II-1. The permit area includes the original permit area, except for the Sunnyside Cogeneration Associates' permit area (formerly Sunnyside Coal Company's Refuse Disposal Area), plus all incidental boundary changes which have been made and approved in the past.

A total of ~~182~~ 184 acres have been or will be disturbed. An additional 5.88 acres have been contemporaneously reclaimed in Slaughter Canyon. The distribution of the disturbed areas are shown on Table III-24 and III-43.

### 3.2.11 Additional Areas for Surface Disturbance for Life of Mine

There are no new planned areas of disturbance during the permit term.

### 3.2.12 Detailed Construction Schedule

There is no new planned construction during the permit term.

## 3.3 Operating Plan

### 3.3.1 Mining Plans

The Sunnyside coal property has been mined continuously since the late 1890's. Over sixty million tons of coal have been extracted during this period. Kaiser Steel Corporation leased the No. 2 Mine from Utah Fuel Company in 1942 to provide coking coal to the newly constructed steel mill at Fontana, California. In 1950, Kaiser Steel purchased the entire property. Since 1950, the major production areas have been shifted from the No. 2 Mine near the southeast boundary to the No. 1 Mine area to the northwest (see Plate III-3).

At the present time, the Sunnyside workings extend along the strike from the Columbia Mine northwestward to the boundary of the B Canyon Federal Lease a distance of approximately 6-1/2 miles. Workings down-dip from the outcrop have reached a maximum of 2-1/2 miles. Future workings will be further extensions down-dip (see Plate III-4).

The Sunnyside complex encompasses three mines, each with its separate ventilation, access and haulage systems. At present, the

## Chapter III

Those disturbed areas which have been revegetated prior to the ACT were mapped in the fall of 1983 and are also shown on Plates III-20 through III-23. These maps delineate pre-law areas which remain to be revegetated and will enable determination of the level of reclamation required for any pre-law areas which may be re-disturbed.

Upon completion of the Methane Drainage Borehole facility, as soon as weather conditions allow, the drill pad will be permanently reclaimed as outlined in section 3.5.5, except for the wellhead and shack. The access road shown on Plate III-1Di is temporary, to be used only during facility construction. The temporary access road will also be reclaimed upon completion of the facility, and will not be used except for emergencies after reclamation.

At the Dewatering Borehole facility, the temporary drill pad will be permanently reclaimed as outlined in section 3.5.5, except for the wellhead and shack which are permanent and have a post mining land use.

### 3.5.1.2 Soil Removal and Storage

Because the Sunnyside Mines have been active since the late 1800's, the permit area includes 136.645 acres of land were disturbed prior to the 1977 Act that did not require topsoil removal before mining or surface facilities construction. The present status of this land includes active and inactive non-reclaimed areas as well as some reclaimed sites.

The 83 acres encompassed by the refuse and slurry piles will remain active until cessation of mining activities, although some reclamation of this area will occur contemporaneously.

Very little topsoil will be available for use in reclamation for any lands that were disturbed prior to the 1977 Act because topsoil material was not salvaged. In addition, estimation of the available in-place soil quality or quantity is difficult because many large areas have been disturbed, regraded, and spread with clinker and some of these areas have been revegetated. No records exist about disturbances, but we do know that part of the main facilities are located on a pre-existing townsite and that much of Grassy Trail Creek has been channelized, resulting in increased perturbation of the soils.

Large portions of the facilities are located over the HBC (Haverson fine sandy loam) mapping unit, which has an average depth of sixty inches (Plate VIII-1). Potentially, this material is available for revegetation. Although this soil becomes increasingly alkaline with depth, the texture remains suitable for plant

## Chapter III

growth. The extent of activities on this soil series is unknown, but no toxic materials were present in the test pits. In order to characterize and determine the extent of the in-place soils in

these areas, several test pits were dug around the facilities in the fall of 1983.

Within each soil pit, soil samples were taken at twelve inch increments. A visual examination of soil texture, color, and quality was also made. Details concerning the sampling methods, laboratory procedures, and results are contained in Chapter VIII.

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**DRAFT**

Chapter VII

the Manshaft Pumpline is shown on Drawing B4-0082, "Detailed Surface Facilities Area - 6", and the location of the old 10" Culinary Water Line is shown on Plate III-16.

SCC has additional plans to attach the Manshaft Pumpline and the Twinshafts Pumpline to the old 10" Culinary Water Line, owned by the cities of Sunnyside and East Carbon and leased to SCC, in order to complete a system that will permit the diversion of mine water to any point on its property in order to allow for additional settling and treatment of mine water. Connections will be made from the Manshaft Pumpline and the Twinshafts Pumpline to the old 10" Culinary Water Line at the 001 Mine Water Pond (see Drawing No. B4-0081), and from the Culinary Water Line to the 002A and 002B Mine Water Ponds via a connection at the Whitmore Fan Return Air Shaft (see Drawing No. B4-0082). A valve installed at this connection will allow either the diversion of water to the 002A and 002B Ponds or continuation of flow through the 10" Culinary water line to the Twin Tanks. The location of the old 10" Culinary Water Line is shown on Plate III-16.

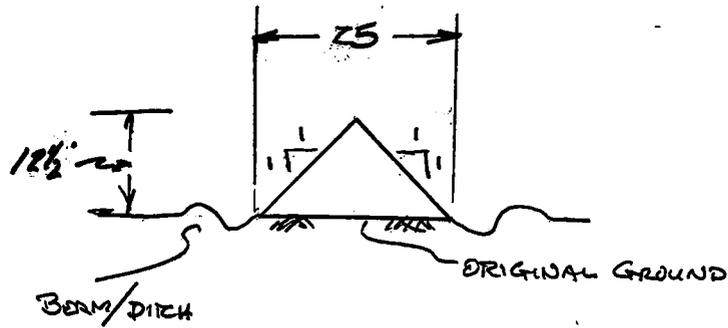
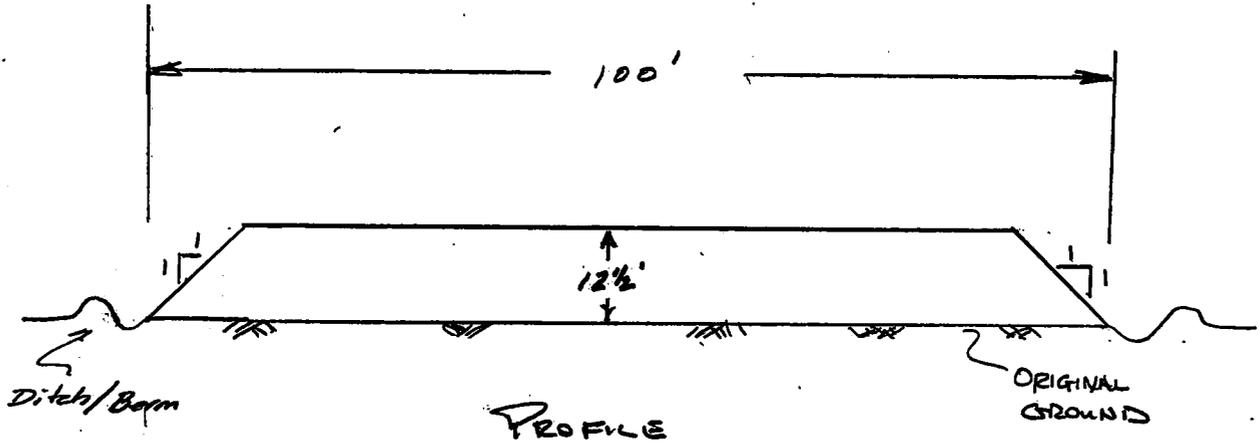
Sunnyside Cogeneration Associates (SCA) will install a deep-well pump in a Dewater Borehole facility in Water Canyon as shown on Plate III-1Dj. The water is used in the powerplant owned by SCA and is delivered from the wellhead by pipeline to either 001 Pond or the powerplant's reservoir. When the borehole pump is activated, the Manshaft pumps use will be discontinued.

(3) A pair of entries completed in the early 1060's was driven across a portion of U.S. Steel's B Canyon Federal Lease and to the outside. Permission was granted by U.S. Steel to Kaiser Steel to use these entries as return air courses. As there was some water build-up in these entries, a 4-inch steel line was installed from this area to the main portal of No. 1 Slope. The flowmeter installed in this line showed an average discharge rate of 4 gpm over a one year period.

(4) Excess water from the No. 3 Slope, not used underground,

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DRAFT



Capacity of Stockpile → 521 cu. yards.

DRAFT

7600

DDH 28

DRILL PAD  
DISTURBED AREA  
PERIMETER

DIVERSION  
DITCH/BERM

DEWATERING  
BOREHOLE  
&  
SHACK

ROOF ELEVATION-  
5762'

SURFACE ELEVATION-  
7575'

UP&L  
PP

TOPSOIL  
STORAGE  
PILE

SILT FENCE

UP&L  
PP

PLATE III-IDJ.

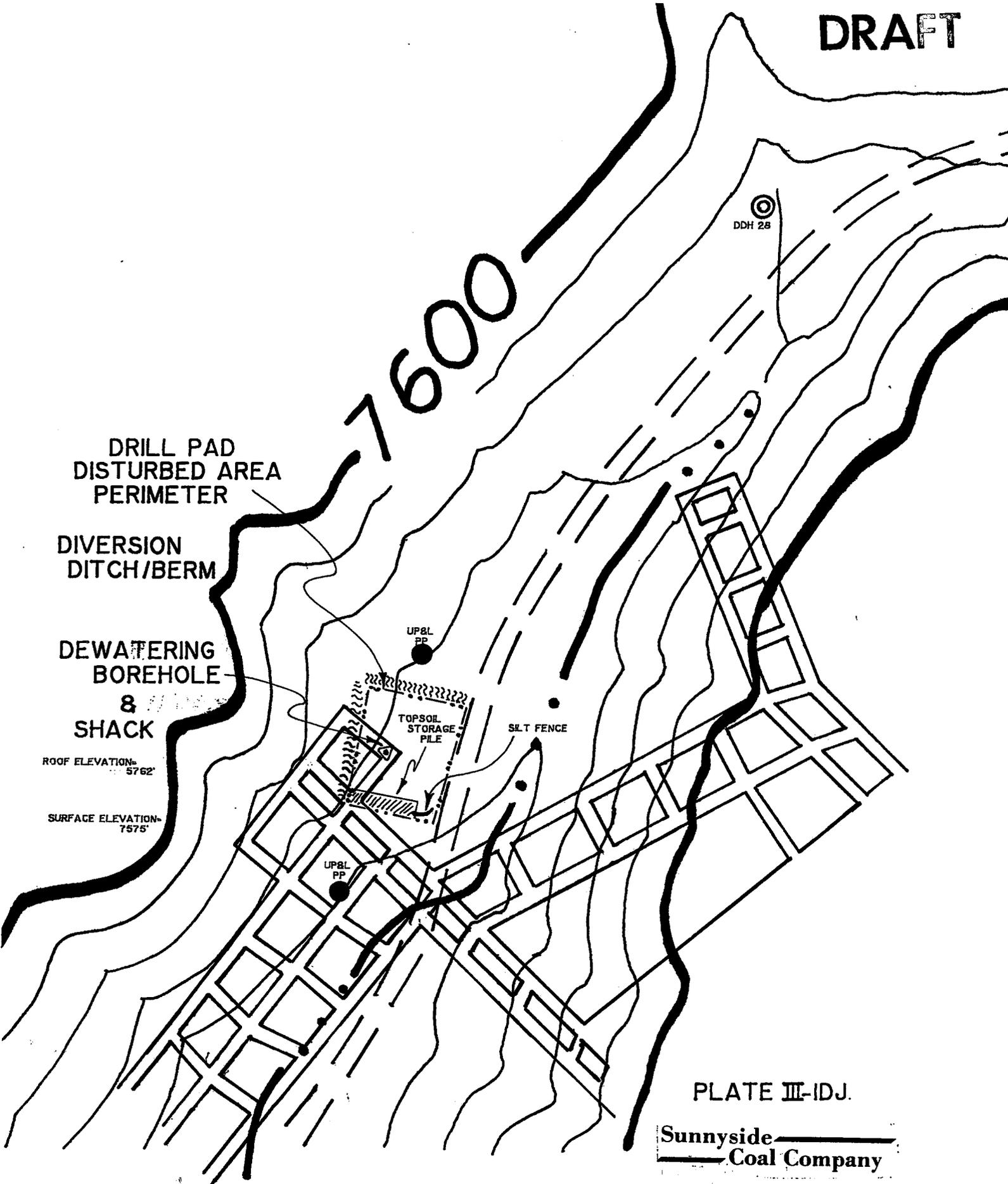
Sunnyside  
Coal Company

WATER CANYON/MANSHAFT  
DEWATERING BOREHOLE

CONTOUR INTERVAL- 40'

SCALE: 1"=200'

2/94



DRAFT

X 8550

DRILL PAD  
DISTURBED AREA  
PERIMETER

DEWATERING  
BOREHOLE

DDH 28

6" DIAMETER  
PIPELINE  
(DISTURBED AREA  
CORRIDOR)

EAST CARBON CITY  
10" CULINARY LINE

Water Canyon

EXISTING UP&L POWERLINE  
TO BRUIN POINT

Manshaft

Fan

OOI MANSHAFT MINE  
WATER POND

Sunnyside Coal Company	DWG.NO. B5-0074
WATER CANYON-MANSHAFT DEWATERING BOREHOLE	
SCALE: 1"=500'	PLATE III-IDK
DR.BY- PH HESS	DRAWN: 2/94