



**Canyon Fuel  
Company, LLC**

A Subsidiary of Wolverine Fuels, LLC

**Skyline Mine**

Gregg A. Galecki, Sr. Environmental Engineer  
HC35, Box 380  
Helper, Utah 84526  
(435) 448-2636  
Fax (435) 448-2632

November 30, 2018

Daron Haddock  
Coal Program Manager  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

RE: Swens Pad Interim Design, Canyon Fuel Company, LLC, Skyline Mine, C/007/005

Dear Mr. Haddock:

As you and I discussed a few weeks ago, attached are modifications to the Swens Canyon Ventilation shaft to include an emergency hoist, fuel storage, rescue building, and gravel storage. This layout has been presented to Jeff Salow and other USFS personnel without receiving any concerns. Included are modifications to Plate 3.2.4-4A and Plate 3.2.4-4B and the demolition sheets in the reclamation bond. Note that the cuttings pond has been removed from the plates. The existing reclamation bond adequately covers the additional costs of the proposed increase in demolition. The cost associated with the earthwork and revegetation of the cuttings pond have not been removed from the reclamation bond. Once the site is completely constructed an As-built drawing of the site will be submitted.

Attached to this cover letter are completed C1 and C2 forms and the modification materials. The information is being submitted electronically. Two (2) hard copies will be sent upon Division approval.

If you have any questions, please call me at (435) 448-2636.

Sincerely,

Gregg A. Galecki  
Sr. Environmental Engineer, Skyline Mine  
Canyon Fuel Company, LLC

# APPLICATION FOR COAL PERMIT PROCESSING

Permit Change  New Permit  Renewal  Exploration  Bond Release  Transfer

**Permittee:** Canyon Fuel Company, LLC

**Mine:** Skyline Mine

**Permit Number:** C/007/005

**Title:** Swens Pad Interim Design

**Description,** Include reason for application and timing required to implement:

Modifications to the Swens Pad to construct additional features.

**Instructions:** If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- |   |   |
|---|---|
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ <input type="checkbox"/> increase <input type="checkbox"/> decrease. |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 2. Is the application submitted as a result of a Division Order? DO# _____  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?                                     |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 4. Does the application include operations in hydrologic basins other than as currently approved?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 6. Does the application require or include public notice publication?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 7. Does the application require or include ownership, control, right-of-entry, or compliance information?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 9. Is the application submitted as a result of a Violation? NOV # _____   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 10. Is the application submitted as a result of other laws or regulations or policies?<br><i>Explain:</i> _____                                   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 11. Does the application affect the surface landowner or change the post mining land use?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)                                |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 13. Does the application require or include collection and reporting of any baseline information?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 15. Does the application require or include soil removal, storage or placement?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 16. Does the application require or include vegetation monitoring, removal or revegetation activities?  |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 17. Does the application require or include construction, modification, or removal of surface facilities?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 18. Does the application require or include water monitoring, sediment or drainage control measures?  |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 19. Does the application require or include certified designs, maps or calculation?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 20. Does the application require or include subsidence control or monitoring?   |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 21. Have reclamation costs for bonding been provided?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 23. Does the application affect permits issued by other agencies or permits issued to other entities?   |

**Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you.** (These numbers include a copy for the Price Field Office)

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.

Craig Brown  
Print Name

C. R. Engineering manager, 11-30-18  
Sign Name, Position, Date

Subscribed and sworn to before me this 30 day of NOV, 2018

Melissa Willden  
Notary Public

My commission Expires: 3-19, 2019 } ss:  
Attest: State of UT }  
County of Carbon



<b>For Office Use Only:</b>	<b>Assigned Tracking Number:</b>	<b>Received by Oil, Gas &amp; Mining</b>



## Bonding Calculations

### Direct Costs

Subtotal Demolition and Removal	\$2,141,966
Subtotal Backfilling and Grading	\$1,343,339
Subtotal Revegetation	\$313,143
<b>Direct Costs Subtotal</b>	<b>\$3,798,448</b>

### Indirect Costs

Mob/Demob	\$379,845	10.0%
Contingency	\$189,922	5.0%
Engineering Redesign	\$94,961	2.5%
Main Office Expense	\$258,294	6.8%
Project Management Fee	\$94,961	2.5%
<b>Subtotal Indirect Costs</b>	<b>\$1,017,983</b>	<b>26.8%</b>

<b>Total Cost 2014</b>	<b>\$4,816,431</b>
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Escalation factor		5
Number of years		0.019
Escalation	\$479,715	

Reclamation Cost Escalated	\$5,296,146
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<b>Reclamation Bond Amount (rounded to nearest \$1,000) 2019 Dollars</b>	<b>\$5,296,000</b>
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Posted Bond March 18, 2015	\$5,799,000
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Difference Between Cost Estimate and Bond	\$503,000
Percent Difference	8.67%

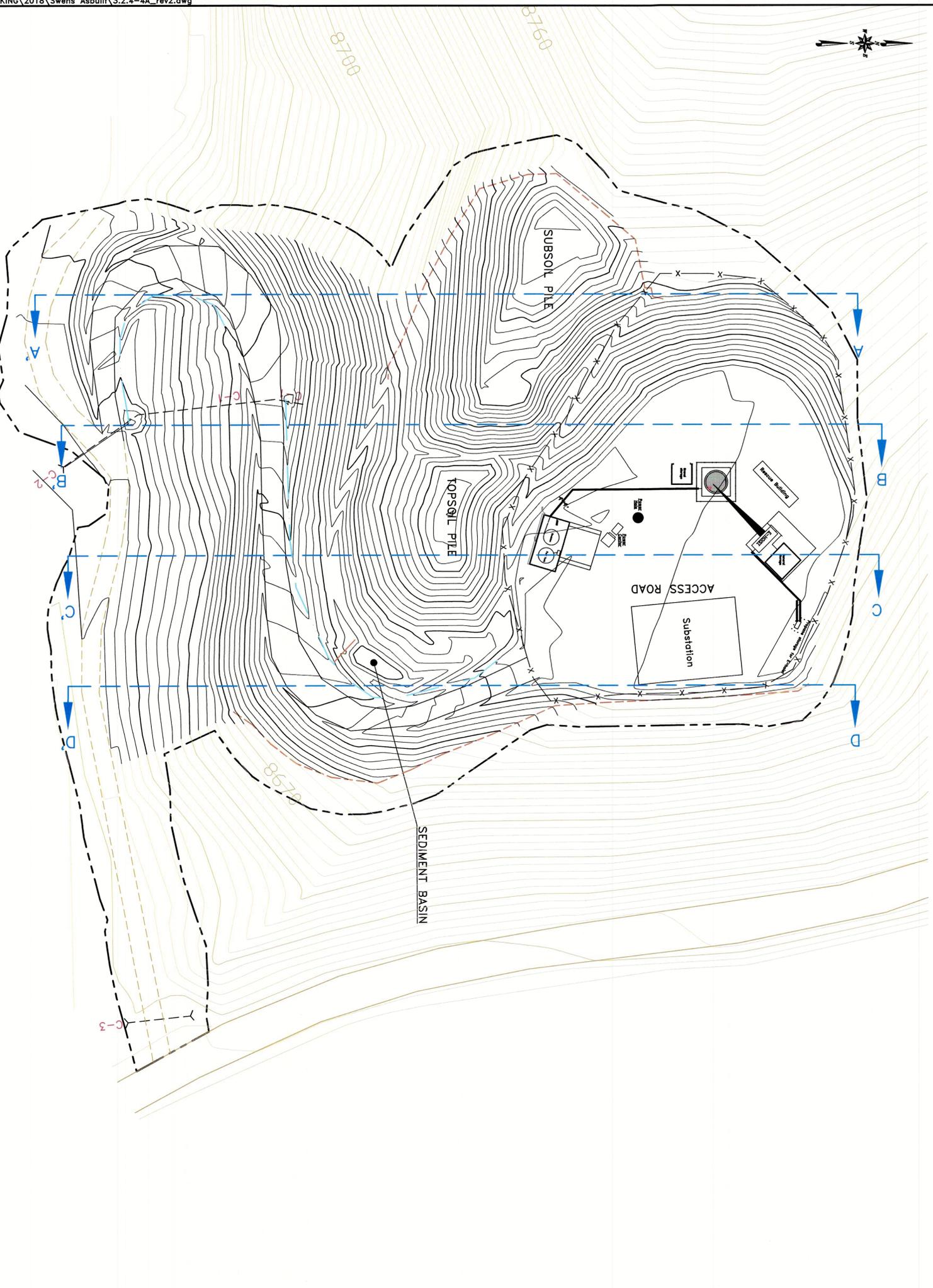
Errors in permittee's total sheet: indirect should be updated, escalation should be held constant at \$479,715, TOTAL rec bond amount in 2019 \$5,455,000

Demolition Costs

Ref.	Description	Motor/Means Reference Number	Unit Cost	Unit Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit Swell Factor	Quantity	Unit Cost
	Shop Warehouse 01															299852
	Administration Bld 02															27154
	Mine No 1 Transfer Tower 03															44106
	BC 2 Drive House 04															9422
	BC 3 Drive House 05															42220
	Crusher Raw Coal 06															20778
	Truck Loadout 07															4807
	Railcar Loadout 08															23377
	Conveyors 8 total 09															114289
	Water Tanks Two 10															2252
	Pump House 11															1601
	Well House Three 12															4756
	Water Treatment Bld 13															17830
	Misc Storage Bld 14															8386
	Overland Conveyor 15															95092
	Guard Rail 16															18269
	Rock Dust Bld 17															7075
	Overland Dust Collector 18															1525
	Substation 19															2609
	Power Line 20															528
	Cap Magazine 21															38
	Fuel Storage 22															1347
	Propane Tanks 23															1820
	Stacking Tube 24															7346
	Reclaim Tunnel 25															60762
	Slope Protection Apron 26															23345
	Concrete Lined Ditch 27															1175
	Raw Coal Silo 28															21061
	Parking Area Middle 29															3262
	Truck Loadout Foundation 30															310
	Road Pad Lower 31															5054
	Site Rail Loadout 32															186868
	Loadout Foundation RR 33															7693
	Pavement Rail Loadout 34															48718
	Steel 35															11075
	James Canyon 36															126205
	Culvert Backfilling 37															9041
	Channel Construction 38															520548
	Equipment 39															237900
	Portal Face Door 40															6295
	Concrete Building 41															2274
	Winter's Quarters Ventilation 42															54782
	North of Graben Bleeder Shaft 43															17181
	Svens Canyon Ventilation Facility 44															41927
	Total															7,141,966

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
	Swens Canyon Vent Facility 44																				
	Steel																				
	Substation Transformers																				
	Structure's demo	Steel Bld. Largo	02 41 16 13 0020	0.27 /CF	CF						1000							1000	CF	270	
	Fuel Containment cover																				
	Structure's demo	Steel Bld. Largo	02 41 16 13 0020	0.27 /CF	CF						12600							12600	CF	3402	
	Fencing																				
	Topsoil pile	Fencing barbed wire 3 strand chain link remove 8'-10"	02 41 13 60 1600	2.1 LF	LF	1050														2285	
	Ventilation pad	Fencing barbed wire 3 strand	02 41 13 60 1700	4.22 LF	LF	1000														4220	
	Cuttings Pond																				
	Subtotal					1100															2310
	substation pad	Nielson Concrete <15"	Nielson Quoto	13.75 /CY	CY						36										12407
	Hoist pad	Nielson Concrete <15"	Nielson Quoto	13.75 /CY	CY						43										405
	Fuel Bay	Nielson Concrete <15"	Nielson Quoto	13.75 /CY	CY						54										610
	Shaft collar and pad	Nielson Concrete <15"	Nielson Quoto	13.75 /CY	CY						100										743
	misc (gravel bin)	Nielson Concrete <15"	Nielson Quoto	13.75 /CY	CY						30										1375
	Concrete's vol	Nielson Concrete <15"	Nielson Quoto	13.75 /CY	CY						25										413
	Loading Cost																				344
	Disposal Costs	Front end Loader 3 CY	31 23 16 42 1300	1.87 /CY	CY																434
	Loading Cost	On site disposal	02 41 18 17 4200	8.65 /CY	CY																2249
	Subtotal																				6874
	Transmission line removal																				
	demo cost	DER Series II (9-54) (1st14)	(9-54) st 14	180.4 /HR	HR									120							22848
	Subtotal																				22848
	Subtotal																				
	Total																				61927

# SWENS CANYON SHAFT PAD LAYOUT



### INDEX OF DRAWINGS

TITLE	SHEET NO.
COVER SHEET AND FINAL OPERATIONAL PLAN	SHEET 1
OPERATIONAL CROSS-SECTIONS AND ROAD PROFILE	SHEET 2
POND AND SEDIMENT BASIN DRAINAGE PLAN	SHEET 3
WATERSHED AND DRAINAGE DETAILS	SHEET 4
DRAINAGE DETAILS	SHEET 5
TOPSOIL REMOVAL PLAN	SHEET 6
RECLAMATION PLAN	SHEET 7
RECLAMATION CROSS-SECTIONS	SHEET 8

### LEGEND

- 8140 ——— EXISTING GROUND MAJOR CONTOUR (10 FOOT)
- EXISTING GROUND MINOR CONTOUR (2 FOOT)
- 8140 ——— OPERATIONAL GROUND MAJOR CONTOUR (10 FOOT)
- OPERATIONAL GROUND MINOR CONTOUR (2 FOOT)
- PRE-EXISTING ROAD
- PRE-EXISTING PAVED ROAD
- ROAD
- DISTURBED AREA BOUNDARY
- BRM OR SILT FENCE
- DITCH
- X — X — FENCE
- C-1 — Culvert
- OPERATIONAL CROSS SECTION LOCATION (SEE SHEET 2 FOR CROSS-SECTIONS)

OPERATIONAL (CUBIC YARDS)			
SOIL	CIVILSD CUT	CIVILSD FILL	TOPSOIL REMOVED
PAD	27,800	100	5,700
ACCESS ROAD	5,000	1,600	3,500
TOTAL	51,700	32,100	15,100

DISTURBED AREA = 4.2 ACRES

CUT AREAS ALONG THE ACCESS ROAD AND PAD ARE DESIGNED AT 1.5:1 (HORIZONTAL/VERTICAL), WHERE BEDROCK IS ENCOUNTERED THE SLOPE MAYBE AS STEEP AS 0.5:1, AS APPROVED BY ENGINEER.  
THE D.A.B ALLOWS FOR VARIATIONS IN CUT SLOPE

EarthFax Engineering, Inc.  
Engineers/Scientists

SEAL:

DATE No. REVISIONS

11/18	2	Removal of Pond and proposed location of added structures
17/16	1	Original Map

Scale: 1" = 60'

EarthFax Engineering, Inc.  
Engineers/Scientists

REGISTERED PROFESSIONAL ENGINEER  
CHING WILLIAM BROWN  
No. 871250-2202  
STATE OF CALIFORNIA  
LICENSE NO. 71-50-73

DATE No. REVISIONS

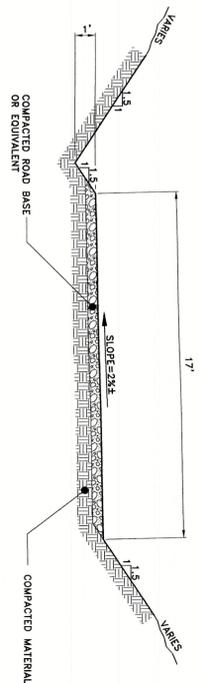
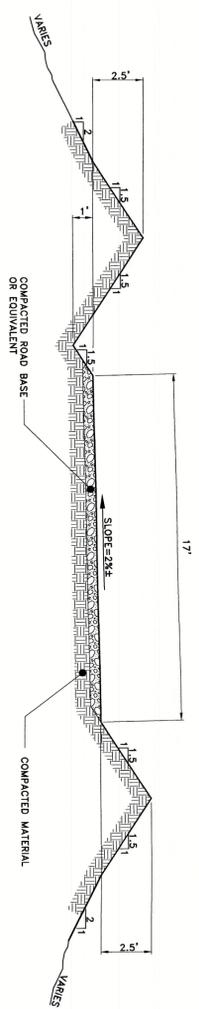
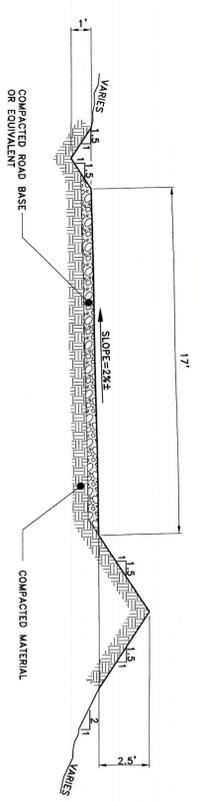
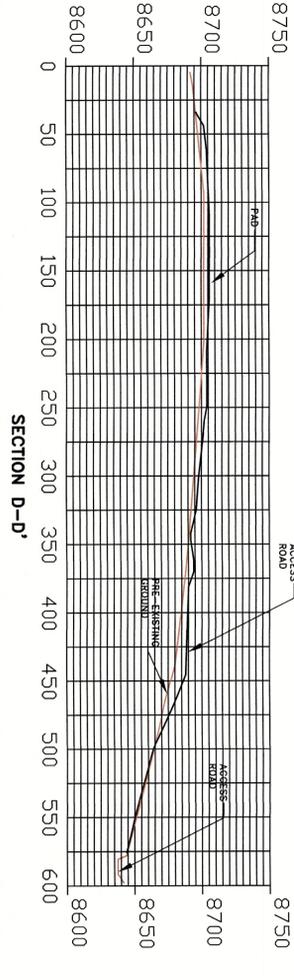
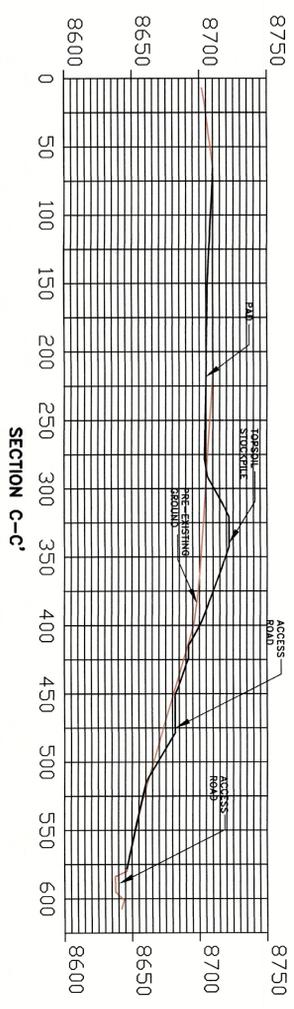
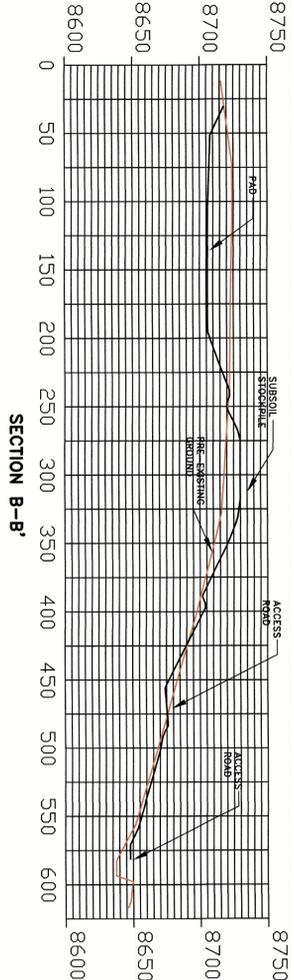
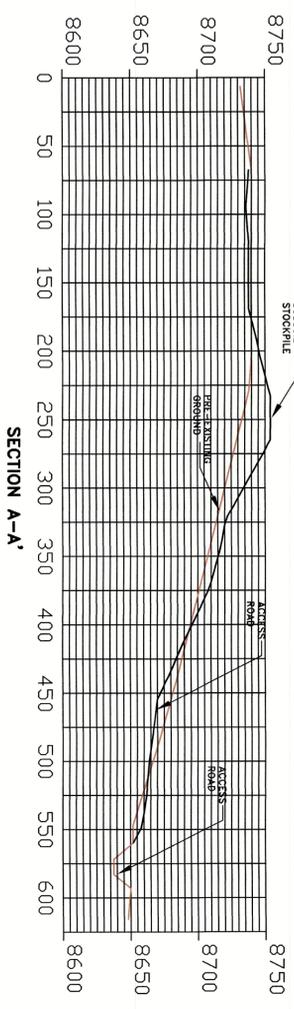
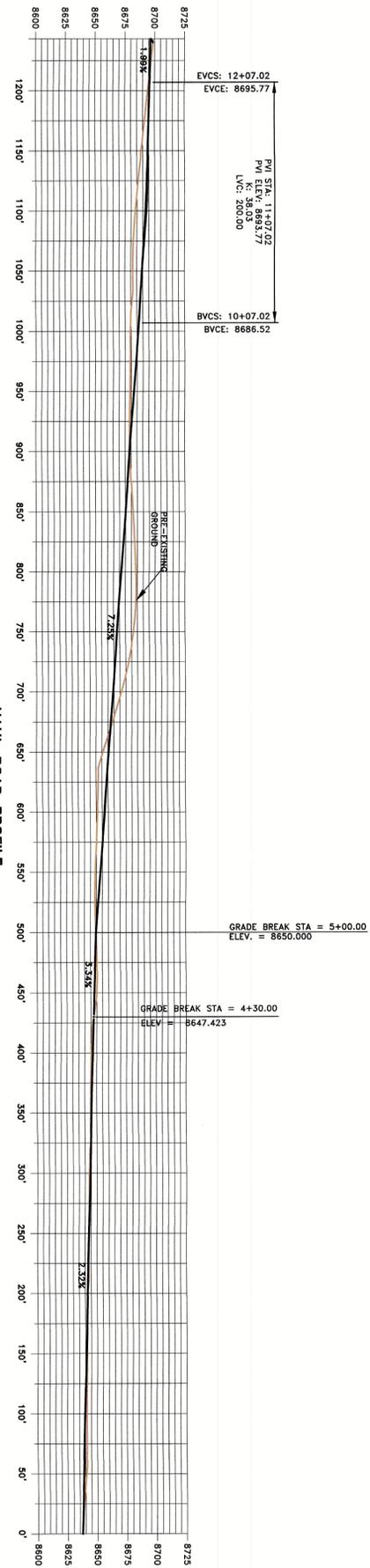
11/18	2	Removal of Pond and proposed location of added structures
17/16	1	Original Map

Scale: 1" = 60'

Skylime Mine  
Swens Canyon Shaft  
Interim Facility Layout

**Canyon Fuel Company, LLC**  
Skylime Mines

DATE: JAN, 2016  
SCALE: 1" = 60'  
DWG. NO.: 3.2.4-4A  
SHEET 1 11/29/18



SEAL:

DATE	NO.	REVISIONS
1/16	1	Original Map
11/18	2	Removal of Pond



SWENS CANYON  
SHAFT  
CROSS SECTIONS AND ROAD PROFILE

**Canyon Fuel Company, LLC**  
Skyline Mines

DATE: Jan 2016  
SCALE: AS SHOWN  
DWG. NO.: 3.2.4-4B  
SHEET 2