C/041/002 Incoming

Canyon Fuel Company, LLC.
Sufco Mine
A Subsidiary of Arch Western Bituminous Group, LLC.

Ken May, General Manager
597 South SR 24
Salina, UT 84654
(435) 286-4400 - Office
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February 9, 2011

Permit Supervisor
Utah Coal Regulatory Program
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

Re: Construction of West Lease Portals, Canyon Fuel Company, LLC, SUFCO Mine C/041/002

Dear Permit Supervisor:

The enclosed four redline copies of the West Lease Portals Amendment are being submitted for approval to construct two new concrete tunnels to access the West Lease Area of the mine. Attached are DOGM forms C-1 and C-2, MRP Table 5-4 "Description of Existing Structures" pages 5-44, 5-45 and 5-46, updated bond calculation sheets, and a construction drawing that shows the proposed locations and details of construction activities. All activities will occur within our current disturbed area boundary at the minesite.

Sufco is in the process of expanding mining operations into the West Lease Area. In order to access the area Sufco permitted three new portals in 2010 (Task ID #3548). Portals 1 and 3 (numbering from West to East) where opened in late 2010. The determination was made that the grade coming out of two of these portals (1 and 2) would be too steep to allow access to the West Lease area from the upper yard area at Sufco's minesite. In order to access the new mining area Sufco wants to permit and construct two concrete tunnels under the upper yard and opening in the current concrete coal storage area of the lower yard.

The following will be used for naming the portals in the rest of the document. Portal 1 and the first concrete tunnel is the West Lease Beltline (WLB), Portal 2 and the second concrete tunnel is the West Lease Main Haulage (WLMH) and Portal 3 is the West Lease Secondary Haulage (WLSH).

The construction drawing was created using Plate 5-2A, Detail of East Spring Canyon Surface Facilities and that plate can be used for reference.

The construction will occur in the following being removed from the Sufco minesite: The covered storage building, 3 shelves and the storage trailer in the upper yard, the concrete stoker coal storage bins and a drop inlet for the 10" mine yard drain system above the concrete stoker coal storage bins.

Two concrete tunnels will be constructed from the lower mine yard under the upper yard and into the West Lease area. The WLB is the west tunnel and is approximately 280 feet in length. The WLMH is the east tunnel and is approximately 300 feet in length. Once constructed they will allow access to the mine and retain the upper yard at the minesite. The WLMH will also have a concrete vent shaft extending approximately 10 feet to the surface at its east end to allow for addition ventilation of the mine. Details of the tunnels and vent shaft are on the construction drawing being submitted.

The current stoker coal storage bins act as the retaining wall between the upper and lower yards. A new retaining wall will be constructed surrounding the portals for the beltline and main haulage way.

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This wall will support the upper yard and the road leading to the upper yard/shop area. The area above the new portals will be sloped to allow yard drainage to flow over the surface to the sediment trap in lieu of the drop inlet that will be removed. Details of the retaining wall have been included on the construction drawing.

Bonding calculations for the tunnels, vent shaft and retaining wall have been combined into a new bond sheet named West Lease Tunnels. It has been included in this submittal.

Since the new portals will result in the loss of three concrete storage bins a new bin will be built adjacent to the current sand and salt bin. It will be the same size as the two bins adjacent to it. The current sand and salt bin will also be used for coal storage. A coal bin to the west of the Stoker Bin will be used for sand and salt storage in the winter. Locations of the bins can be found on the construction drawing and a detail drawing of the new bin has been included.

The location and depth of the concrete tunnels will result in the replacement of the 42" undisturbed bypass culvert that drains Mud Spring Hollow into the 72" undisturbed culvert draining East Spring Canyon under the mine yard. The 42" culvert will run parallel to the WLB tunnel and reconnect to the 72" bypass culvert via a concrete junction box in the lower mine yard. Approximately 500 feet of the 72" culvert will also be replaced at this time and moved so that it does not run beneath any structures. A junction box will be placed on each end of the pipe to connect the new sections of culvert with the existing ones. The new culvert will run parallel to the WLMH tunnel and reconnect with the existing culvert in a junction box at the same location as the new 42" culvert. Approximately 445 feet of culvert will be used for the Mud Spring Hollow culvert and approximately 480 feet of 72" culvert will be used for the East Spring Canyon culvert. Six concrete junction boxes will be used. Bonding calculations have been updated accordingly. Locations of the culverts can be found on the construction drawing along with details for the junction boxes.

The following bond calculation pages have been updated with this submittal:
Total2068 page 1
Demo2068 page 1
Demo2068 Covered Storage page 10
Demo2068 Drainage Culverts page 12
Demo2068 Lump Coal Storage page 20
Demo2068 Pulley Racks page 25
Demo2068 Sand and Salt Storage page 32
Demo2068 Shelves page 36
Demo2068 Stoker Coal Storage page 44

The following bond calculation page was added with this submittal:
Demo2068 West Lease Tunnels page 64

The new construction is well within the current bond posted by Sufco.

Updated and stamped version of Plates 5-2A, 5-2B, and 7-6 will be submitted once construction activities are completed.

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Sufco would like approval of this amendment as soon as possible to start construction as early in March as possible of this year. If you have any questions or need additional information, please contact Leland Roberts at (435) 286-4483.

Sincerely,
CANYON FUEL COMPANY, LLC
SUFCO Mine

Kenneth E. May
General Manager

Encl.

KEM/FLR:kb

cc: DOGM Price Field Office
DOGM Correspondence File

sufpub\govt2011\dogmmrp\MRP West Lease Portals ltr.doc

APPLICATION FOR COAL PERMIT PROCESSING

COPY

Permit Change ☒ New Permit ☐ Renewal ☐ Exploration ☐ Bond Release ☐ Transfer ☐

Permittee: CANYON FUEL COMPANY, LLC
Mine: SUFCO MINE **Permit Number:** C/041/002
Title: Concrete Tunnels to access the West Lease Area at main mine facilites in East Spring Canyon
Description, Include reason for application and timing required to implement:
Two concrete tunnels at the mine site factilies in East Spring Canyon. Construction to begin March of 2011

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

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

KENNETH E. MAY, MINE MANAGER — Kenneth E May 2/9/11
Print Name — Sign Name, Position, Date

Subscribed and sworn to before me this 9th day of February 20 11

Jill White
Notary Public

My commission Expires: _____, 20___ }
Attest: State of _____ } } ss:
County of _____

NOTARY PUBLIC
JILL WHITE
70 W 500 S
[illegible] UT 84634
My Commission Expires
March 28, 2012
STATE OF UTAH

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APPLICATION FOR COAL PERMIT PROCESSING
Detailed Schedule Of Changes to the Mining And Reclamation Plan

COPY

Permittee: CANYON FUEL COMPANY, LLC
Mine: SUFCO MINE **Permit Number:** C/041/002
Title: Concrete Tunnels to access the West Lease Area at main mine facilites in East Spring Canyon

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED
☐ Add	☒ Replace	☐ Remove	Pages 5-54, 5-55 in Chapter 5, Volume 1 of MRP.
☐ Add	☒ Replace	☐ Remove	Replace Bond Calculation pages: Total2068 page 1, DEMO2068 page 1, in Appendix 5-9 in Volume 6 of MRP.
☐ Add	☒ Replace	☐ Remove	Replace Bond Calculation page: DEMO2068 Covered Storage, in Appendix 5-9 in Volume 6 of MRP
☐ Add	☒ Replace	☐ Remove	Replace Bond Calculation page: DEMO2068 Drainage Culverts, in Appendix 5-9 in Volume 6 of MRP
☐ Add	☒ Replace	☐ Remove	Replace Bond Calculation page: DEMO2068 Lump Coal Storage, in Appendix 5-9 in Volume 6 of MRP
☐ Add	☒ Replace	☐ Remove	Replace Bond Calculation page: DEMO2068 Pulley Racks, in Appendix 5-9 in Volume 6 of MRP
☐ Add	☒ Replace	☐ Remove	Replace Bond Calculation page: DEMO2068 Sand and Salt Storage, in Appendix 5-9 in Volume 6 of MRP
☐ Add	☒ Replace	☐ Remove	Replace Bond Calculation page: DEMO2068 Shelves, in Appendix 5-9 in Volume 6 of MRP
☐ Add	☒ Replace	☐ Remove	Replace Bond Calculation page: DEMO2068 Stoker Coal Storage, in Appendix 5-9 in Volume 6 of MRP
☒ Add	☐ Replace	☐ Remove	Add Bond Calculation page: DEMO2068 West Lease Tunnels, in Appendix 5-9 in Volume 6 of MRP
☐ Add	☐ Replace	☐ Remove	
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Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.

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TABLE 5-4

Description of Existing Structures

Structure	Construction Date	Construction Materials
Ambulance Garage	Summer 2007	Pre-Engineered Steel
Belt Deicer Tank	Fall 1994	Steel
Bulk & Used Oil Storage	Fall 1977 / Fall 2004	Steel & Concrete
Cap Magazine	Summer 1982	Steel & Wood
Chlorinator Building	Summer 1979	Steel
~~Covered Storage~~	~~Summer 1979~~	~~Concrete Block~~
Diesel Tank	Fall 1996	Steel & Concrete
Drainage Culverts	Summer 1976, Summer 2011	Steel
Electrical Building	Summer 1977	Concrete Block
Fan	Winter 1980	Structural Steel
Fire Water Tank - 300,000	Spring 2002	Steel & Concrete
Fuel Dock	Summer 1976	Concrete
Guard House	Summer 1977	Wood
Load-Out Belt	Summer 1975	Structural Steel
Lower Stacker Coal Storage	Summer 1975	Structural Steel
Lump Coal Belt	Fall 2010	Structural Steel
Lump Coal Storage	~~Fall 1981,~~ Fall 1982	Concrete
No. 1 Belt	Fall 1977	Structural Steel
Office Building	September 1973 / 1990 / 2006	Pre-Engineered Steel
Powder Magazine	Summer 1982	Steel and Wood
~~Pulley Racks~~	~~Summer 1991~~	~~Steel~~
Pump Houses	Summer 1967 and 1975	Wood Frame & Metal
Rock Dust Bin	Fall 1976, Summer 1982	Structural Steel

TABLE 5-4 (Continued)

Description of Existing Structures

Structure	Construction Date	Construction Materials
ROM Coal Storage	Winter 1988	Struct. Steel/Concrete
ROM MCC Building	Winter 1988	Concrete Block
Sampler Building	Fall 2003	Structural Steel
Sand & Salt Storage	~~Fall 2010~~ Fall 1981	Concrete
Seal Portals		Concrete
Sediment Trap	Summer 1979	Concrete
Septic Tanks	Summer 1976 / Summer 2006	Steel / Concrete
Shelves	Summer 1990	Steel
Shop Garage	Summer 1989	Pre-Engineered Steel
Shop Office	Summer 1977	Wood
Side Release Tank	Fall 1997	Steel
Steam Cleaner Building	Fall 1981	Concrete
Stoker Belt	Fall 1977	Structural Steel
Stoker Bin	Fall 1977	Structural Steel
~~Stoker~~ Coal Storage	~~Fall 1982~~ Summer 2011	Concrete
Stoker Oil Tanks	Fall 1977 / Fall 2004	Steel & Concrete
Storage Trailers	1975	Wood & Aluminum
Substation - Lower	Fall 1991 / Fall 2006 -2007	Steel /Concrete / Binwall
Ticket Printers	Summer 1996	Steel
Tipple Building	Fall 1977 / Mod. Fall 2008	Structural Steel & Concrete
Tipple MCC Building	Summer 2005	Concrete Block
Tipple Office Building	Fall 1977	Concrete Block

TABLE 5-4 (Continued)

Description of Existing Structures

Structure	Construction Date	Construction Materials
Transfer Building	Fall 1977	Structural Steel
Trash Pit	Fall 2009	Concrete
Truck Loader Bin	Fall 2002	Structural Steel
Truck Scale	1975 / 1982 / 1996	Structural Steel
Warehouse and Shop	Summer 1976	Pre-Engineered Steel
Water Tanks - Lower	Summer 1975/Summer 2002	Steel & Plastic
Water Tank - Upper	Summer 1975	Steel
West Lease Portals	Summer 2011	Concrete
Link Canyon Facilities		
Link Canyon Portals	Spring 2003	Steel
Link Canyon Substation	Summer 2000	Steel Skid
Four East Facilities		
Fan Generator Building	Fall 2003	Pre-Engineered Steel
4 East Fan	Spring 1996	Structural Steel

Bonding Calculations

Direct Costs		
Subtotal Demolition and Removal	$1,094,629.00	
Subtotal Backfilling and Grading	$548,005.00	
Subtotal Revegetation	$171,967.00	
Direct Costs	$1,814,601.00	
Indirect Costs		
Mob/Demob	$181,460.00	10.0%
Contingency	$90,730.00	5.0%
Engineering Redesign	$45,365.00	2.5%
Main Office Expense	$123,393.00	6.8%
Project Mainagement Fee	$45,365.00	2.5%
Subtotal Indirect Costs	$486,313.00	26.8%
Total Cost	$2,300,914.00	
Escalation factor		0.005
Number of years		4
Escalation	$46,365.00	
Reclamation Cost Escalated	$2,347,279.00	
Bond Amount (rounded to nearest $1,000) 2009 Dollars	$2,347,000.00	
Posted Bond	$2,874,000.00	
Difference Between Cost Estimate and Bond	$527,000.00	
Percent Difference	18.34%	

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
	Ambulance Garage																			$2,504.00
	Belt Deicer Tank																			$13.00
	Blast Channels A																			$143,211.00
	Blast Channels B																			$53,488.00
	Bulk and Used Oil Storage																			$1,518.00
	Cap Magazine																			$22.00
	Chlorinator Bld																			$18.00
	Covered Storage *																			$0.00
	Diesel Tank																			$995.00
	Drainage Culvets																			$21,496.00
	Electrical Bld																			$602.00
	Fan																			$7,781.00
	Fire Water Tank 300000 Gal																			$11,126.00
	Fuel Dock																			$928.00
	Guard House																			$349.00
	Loadout Belt																			$2,593.00
	Lower Stacker Coal Storage																			$2,149.00
	Lump Coal Belt																			$533.00
	Lump Coal Storage																			$1,516.00
	No 1 Belt																			$3,404.00
	Office Building																			$67,377.00
	Pavement Removal																			$29,153.00
	Powder Magazine																			$22.00
	Pulley Racks *																			$0.00
	Pump Houses																			$972.00
	Riprap Filter Fabric																			$259,568.00
	Rock Dust Bin																			$3,557.00
	ROM Coal Storage																			$21,139.00
	ROM MCC Bld																			$1,022.00
	Sampler Building																			$991.00
	Sand and Salt Storage																			$711.00
	Seal Portals																			$62,400.00
	Sediment Trap																			$1,533.00
	Septic Tanks																			$0.00
	Shelves *																			$0.00
	Shop and Warehouse																			$80,022.00
	Shop Garage																			$11,941.00
	Shop Office																			$2,322.00
	Side Release Tank																			$161.00
	Steam Cleaner Building																			$7,713.00
	Stoker Belt																			$1,104.00
	Stoker Bin																			$6,755.00
	Stoker Coal Storage																			$3,020.00
	Stoker Oil Tanks																			$1,539.00
	Storage Trailers																			$1,256.00
	Substation Lower*																			$72,822.00
	Substation Upper*																			$0.00
	Ticket Printers																			$69.00
	Tipple Building																			$36,194.00
	Tipple MCC Buidling																			$2,759.00
	Tipple Office Building																			$3,161.00
	Transfer Building																			$10,303.00
	Trash Pit																			$542.00
	Truck Loader Bin																			$1,895.00
	Truck Scale																			$36,352.00
	Water Tank Upper																			$0.00
	Water Tank Lower																			$0.00
	West Lease Tunnels																			$44,159.00
	Link Canyon Facilities																			
	Link Canyon Portals																			$8,042.00
	Link Canyon Substation																			$39,150.00
	Fourth East Facilities																			
	Fan Generator Building																			$2,591.00
	Four East Fan																			$18,066.00

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
	Covered Storage*																			
	Structure's Demolition Cost	Masonary Bld. Large	02220 110 0080	0.21	/CF						47813					CF		0	CF	0
	Structure's Vol. Demolished																0.35	0	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	On site disposal	02220 240 5550	7.6	/CY													0	CY	0
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.97	/CY						120					CY		0	CY	0
	Concrete's Vol. Demolished																1.3	0	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													0	CY	0
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	02315 490 0320	3.44	/CY													0	CY	0
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													0	CY	0
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			

* Covered Storage Building was removed in 2011

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
	Drainage Culvets																			
	42" Mud Spring Canyon CMP removal																			
	42" Culvert Excavate	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	445	3.5	7								FT		404	CY	687
	42" Culvert Backfill	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	445	3.5	7								FT		404	CY	618
	72" East Spring Canyon CMP																			
	72" Culvert Excavate	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	1554	6	12								FT		4144	CY	7045
	72" Culvert Backfill	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	1554	6	12								FT		4144	CY	6340
	48" East Spring Canyon CMP																			
	48" Culvert Excavate	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	505	4	8								FT		599	CY	1018
	48" Culvert Backfill	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	505	4	8								FT		599	CY	916
	24" East Spring Canyon CMP																			
	24" Culvert Excavate	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	250	2	4								FT		74	CY	126
	24" Culvert Backfill	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	250	2	4								FT		74	CY	113
	66" East Spring Canyon Contech Pipe																			
	66" Culvert Excavate	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	340	5.5	4								FT		277	CY	471
	66" Culvert Backfill	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	340	5.5	4								FT		277	CY	424
	18" CMP Sediment Pond Diversion																			
	18" Culvert Excavate	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	1300	2	4								FT		385	CY	655
	18" Culvert Backfill	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	1300	2	4								FT		385	CY	589
	6" ADS Sediment Pond Diversion																			
	6" Culvert Excavate	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	230	2	4								FT		68	CY	116
	6" Culvert Backfill	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	230	2	4								FT		68	CY	104
	Backfill ROM 84" Escapeway CMP	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY						108					CY		108	CY	165
	Backfill Concrete Reclaim Tunnel	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY						600					CY		600	CY	918
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.97	/CY						58.9					CY		59	CY	234
	Concrete's Vol. Demolished																1.3	77	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													77	CY	107
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	02315 490 0320	3.44	/CY													77	CY	265
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													77	CY	585
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			

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
	Lump Coal Storage																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.97	/CY						75					CY		75	CY	298
	Concrete's Vol. Demolished																1.3	98	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													98	CY	136
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	02315 490 0320	3.44	/CY													98	CY	337
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													98	CY	745
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			

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
	Pulley Racks *																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	9	90	14								FT		0	CF	0
	Structure's Vol. Demolished																0.1	0	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity										16					CY		0	Trips	
	Haulage													3		Trip/Day				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	435.96	/day													0	DAY	0
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$42.00	HR													0	HR	0
	Disposal Cost Steel																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			

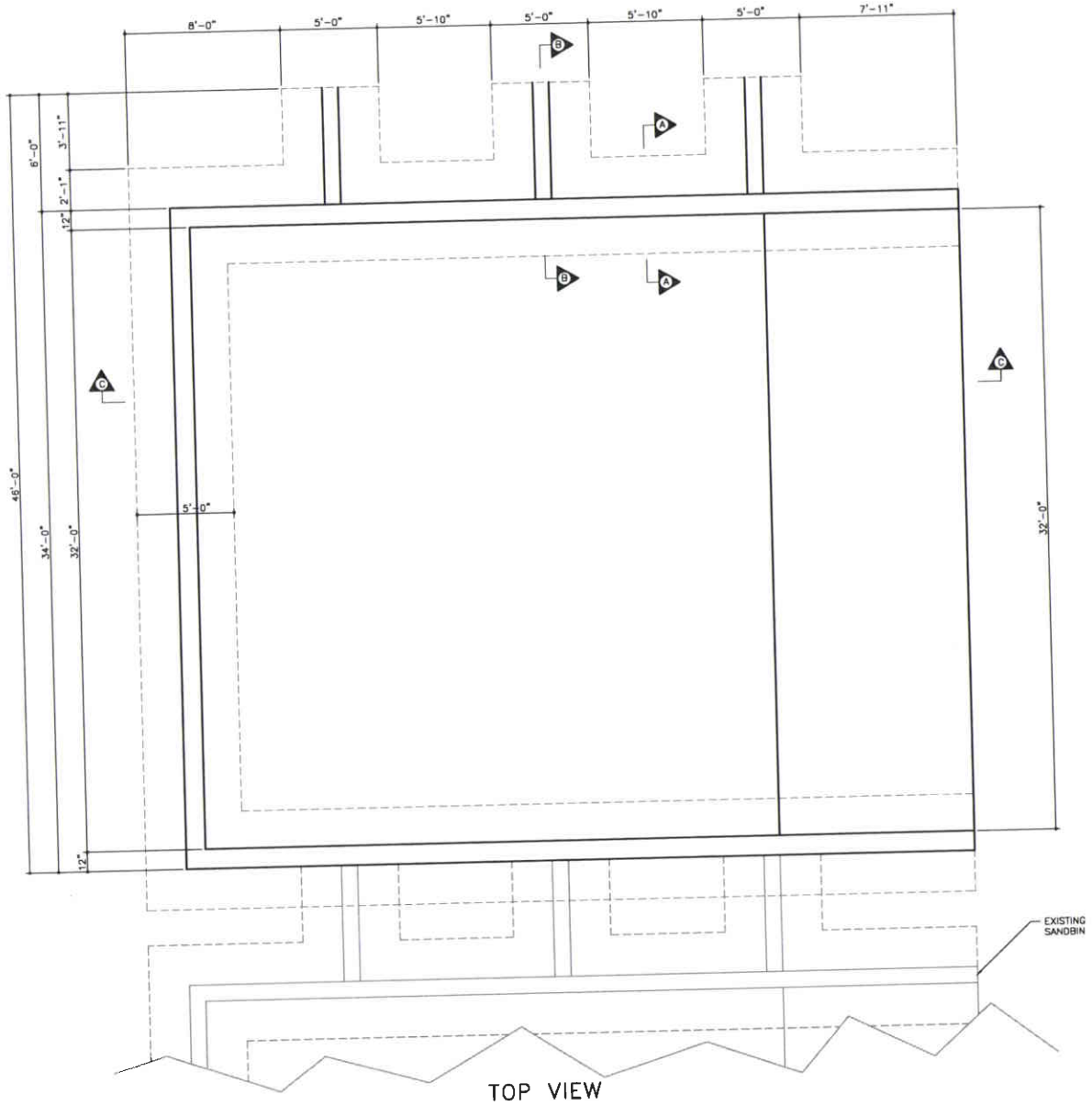
[redacted]

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
	Sand and Salt Storage																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.97	/CY						35					CY		35	CY	139
	Concrete's Vol. Demolished																1.3	46	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													46	CY	64
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	02315 490 0320	3.44	/CY													46	CY	158
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													46	CY	350
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			

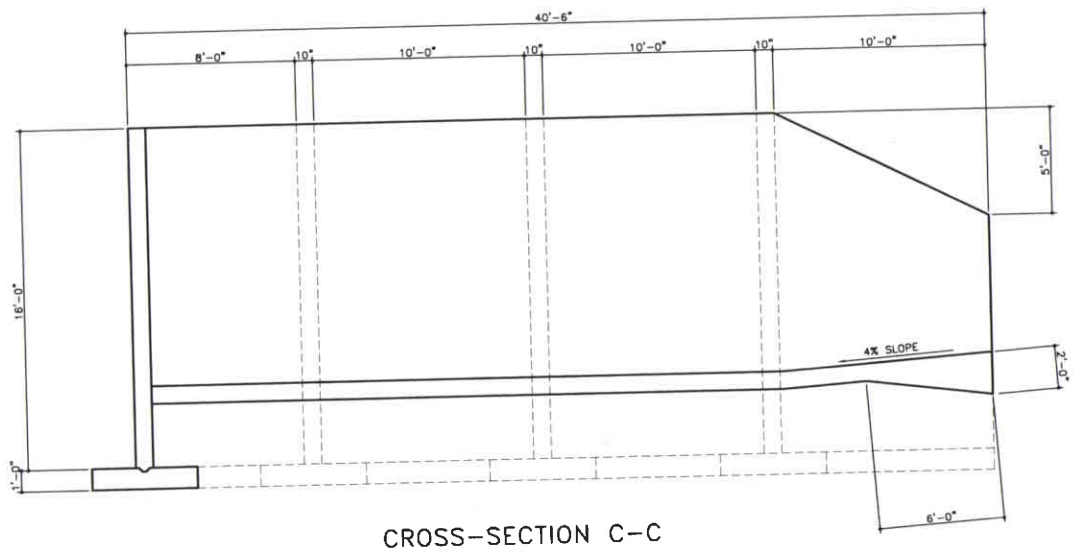
Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Shelves *																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	8.5	37	12							3	FT		0	CY	0
	Structure's Vol. Demolished																0.1	0	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity										16					CY		0	Trips	
	Haulage													3		Trip/Day				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	435.96	/day													0	DAY	0
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$42.00	HR													0	HR	0
	Disposal Cost Steel																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.97	/CY	3	3	9							12	FT		0	CY	0
	Concrete's Vol. Demolished																1.3	0	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													0	CY	0
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	02315 490 0320	3.44	/CY													0	CY	0
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													0	CY	0
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			

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
	Stoker Coal Storage																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.97	/CY						150					CY		150	CY	596
	Concrete's Vol. Demolished																1.3	195	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													195	CY	271
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	02315 490 0320	3.44	/CY													195	CY	671
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													195	CY	1482
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			

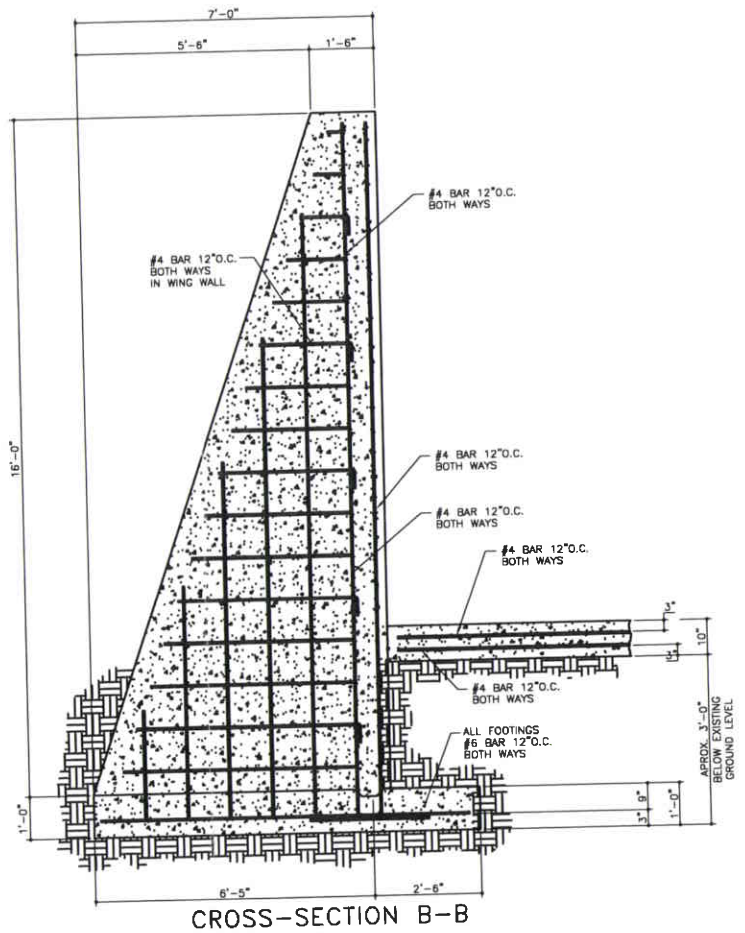
Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	West Lease Tunnels																			
	Structure's Vol. Demolished	Steel Bld. Large	02220 110 0012	0.2	/CF	30	24.5	4								FT		2940	CF	588
	Structure's Vol. Demolished																0.1	11	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity										16					CY		1	Trips	
	Haulage													3		Trip/Day				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	435.96	/day													0.3	DAY	131
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$42.00	HR													2.4	HR	101
	Disposal Cost Steel																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.97	/CY						2153					CY		2153	CY	8547
	Concrete's Vol. Demolished																1.3	2799	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													2799	CY	3891
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	02315 490 0320	3.44	/CY													2799	CY	9629
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													2799	CY	21272
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			



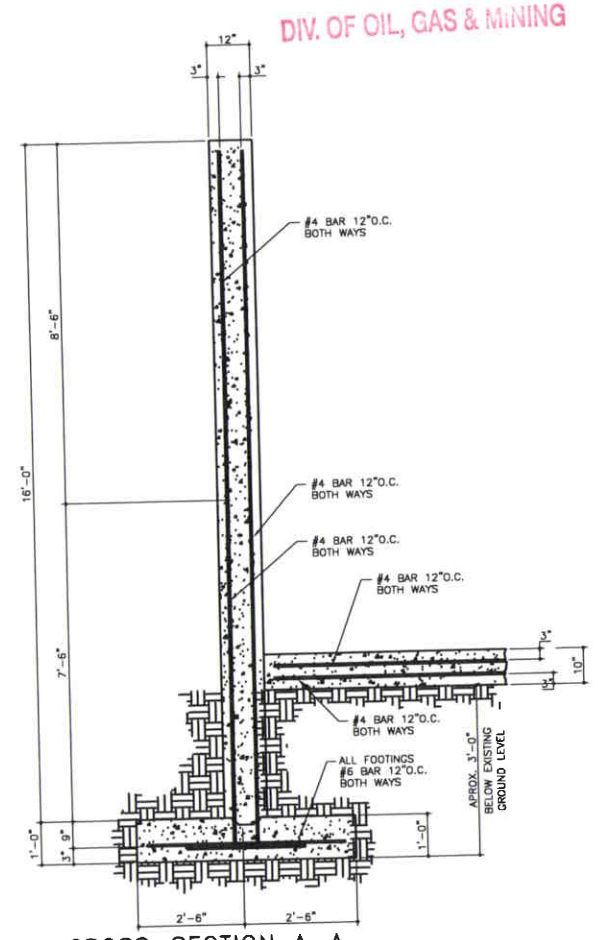
TOP VIEW



CROSS-SECTION C-C



CROSS-SECTION B-B



CROSS-SECTION A-A

NOTES:

1- CONCRETE TYPE II CEMENT CLASS AA (AE) 6.5 BAG.

2- ALL REINFORCING STEEL TO BE EPOXY-COATED WITH THE ENDS PAINTED OR DIPPED WHEN CUT.

3- ALL REINFORCING STEEL DOWELS TO EXTEND A MINIMUM OF 24 INCHES.

4- ONE INCH CHAMFER ON FRONT AND TOP EDGES OF WALLS.

#323980-2202
WESTON J. NORRIS
2/8/11
STATE OF UTAH

RECEIVED
FEB 14 2011
DIV. OF OIL, GAS & MINING

REVISIONS				
NO.	DATE	REQ. BY	DWG. BY	REMARKS

Canyon Fuel Company, LLC
SUFCO Mine
597 South SR 24 – Salina, UT 84654
(435) 286-4880 Phone
(435) 286-4499 Fax

PROPOSED NEW COAL STORAGE BIN

SCALE:	DATE:	DRAWN BY:	ENGINEER:	SHEET NO.
1/4" = 1'-0"	02/08/2011	SKS	WJN	1
CHECKED BY:	FILE NAME:			
WJN	H:\DRAWINGS\TIPPLE\NEW-COALBIN.DWG			