PERMIT I-000601
REFERENCES

1. **Haile Gold Mine Permit I-601 Modification Application** dated November 19, 2010
2. **Haile Gold Mine Permit I-601 Modification (Update)** dated December 26, 2012
3. **Draft Cultural Resources Management Plan, Haile Gold Mine, Lancaster County, South Carolina (USACE Permit No. SAC 1992-24112-4IA)** dated October 25, 2012
4. **Report of Feasibility Level Pit Slope Evaluation,** dated October 2012 and appended (Appendix P) to the 2010 Haile Gold Mine Permit I-601 Modification Application (Reference 1)
5. **Haile Gold Mine Tailing and Process Water Management Permitting Design Report** dated November 15, 2010 and appended (Appendix N) to the Haile Gold Mine Permit I-601 Modification Application (Reference 1)
6. **Haile Gold Mine, Inc. Duckwood Tailings Storage Facility Detailed Design Report** dated August 31, 2012. This document is an update to Appendix N to Reference 1
7. **Duckwood Tailings Storage Facility (TSF) Operation, Maintenance and Inspection Manual** dated August 31, 2012 and appended (Appendix F) to Reference 6
8. **Duckwood Tailings Storage Facility (TSF) Emergency Action Plan (EAP)** dated August 31, 2012 and appended (Appendix H) to Reference 6
9. **Haile Gold Mine Reclamation Plan** revised November 2013. This document was submitted under separate cover in support of Reference 2
10. **Draft Groundwater and Surface Water Monitoring Plan** dated September 2014
11. **Pit Lake Adaptive Management Plan** as submitted in Haile Gold Mine, Inc.'s June 9, 2014 correspondence from J. Pappas (Haile Gold Mine, Inc.) to A. Rowe (SC Department of Health and Environmental Control).
12. **Haile Gold Mine, Inc. Potentially Acid Generating Overburden Storage Area And Contact Water Ponds Detailed Design Report** dated September 2014
13. **Johnny's OSA Operation, Maintenance and Inspection Manual** dated September 2014 and appended (Appendix F) to Reference 12

APPENDIX A

MODIFICATIONS TO MINE PERMIT I-000601

NUMBER	ISSUANCE DATE	DESCRIPTION OF MODIFICATION (PA=Permitted Ac; AA=Affected Ac; FR = Reserves)
Issued	7/3/84	Heap leach operations, closure and reclamation
Mod 14-1	11/5/14	Modified to expand site and reopen. PA=4567ac., AA=2464 ac., FR=0.0ac., Buffer=2103ac.

APPENDIX B

FINANCIAL ASSURANCE BONDING
TABLES & MAPS

BOND-601-V1	HGM Cost Table- Stage 1 Construction	Received 10/14/14
BOND-601-V2	HGM Stage 1 Construction Map	Received 10/14/14
BOND-601-V3	HGM Cost Table- Stage 2 Construction	Received 10/14/14
BOND-601-V4	HGM Stage 2 Construction Map	Received 10/14/14
BOND-601-V5	HGM Cost Table (Preproduction through Year 100)	Received 10/09/14
BOND-601-V6	HGM Preproduction Year Map	Received 12/28/12

Romarco Minerals - Haile Gold Mine
Reclamation & Closure Cost Estimates
Cost Breakdown Table (Stage 1 Only)

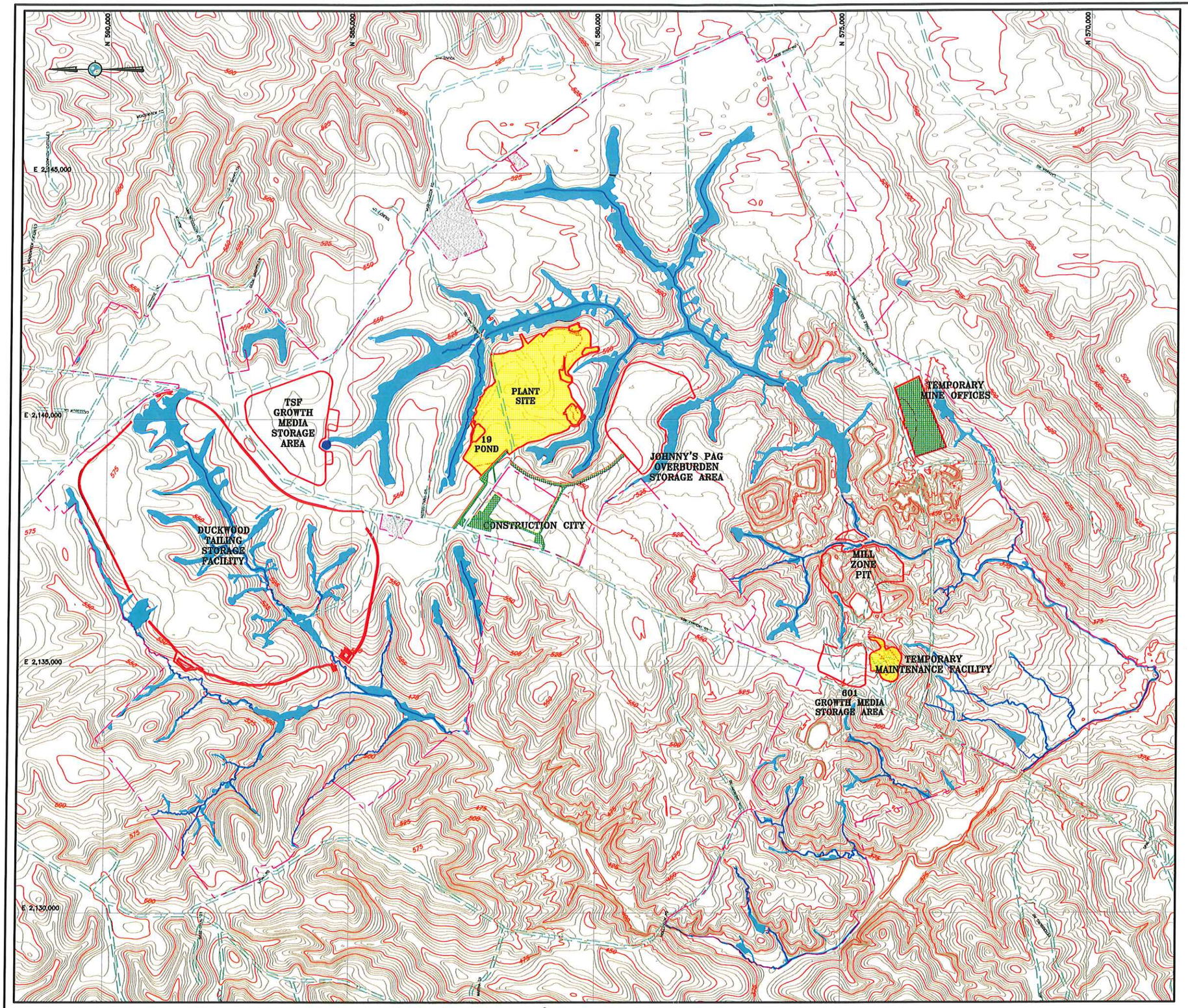
Bond: 601-V1

Facility		Item	Quantity	Units	Rate		Bonded Cost Stage 1
Open Pits							
	Mill Zone Pit						
		Revegetate Stormwater Controls	9	ac	$ 3,000.00	ac	$ 27,300
		Silt Fence	8,500	ft	$ 3.50	ft	$ 29,750
		Indirect Costs					$ 1,638
		Contingency					$ 3,423
		Subtotal					**$ 62,111**
OSAs							
	Johnny's PAG						
		Revegetate Stormwater	9	ac	$ 3,000.00	ac	$ 27,900
		Silt Fence	3,800	ft	$ 3.50	ft	$ 13,300
		Indirect Costs					$ 2,472
		Contingency					$ 2,472
		Subtotal					**$ 46,144**
Growth Media Storage Areas							
	601 GMS						
		Revegetate Stormwater	4	ac	$ 3,000.00		$ 11,100
		Indirect Costs					$ 666
		Contingency					$ 666
		Subtotal					**$ 12,432**
	TSF GMS						
		Revegetate Stormwater	8	ac	$ 3,000.00	ac	$ 22,800
		Indirect Costs					$ 1,368
		Contingency					$ 1,368
		Subtotal					**$ 25,536**
Roads							
	Service Roads (30 feet wide) and culverts		*** Stormwater controls included in acres**				
		TSF Sed Service Road - Scarify	14	ac	$ 184.33	ac	$ 2,581
		TSF Sed Service Road - Revegetate	14	ac	$ 3,000.00	ac	$ 42,000
		TSF Sed Service Road - Silt Fence	20,000	ft	$ 3.50	ft	$ 70,000
		TSF GM Service Road - Scarify	5	ac	$ 184.33	ac	$ 922
		TSF GM Service Road - Revegetate	5	ac	$ 3,000.00	ac	$ 15,000
		TSF GM Service Road - Silt Fence	6,700	ft	$ 3.50	ft	$ 23,450
		JPAG Service Road - Scarify	6	ac	$ 184.33	ac	$ 1,106
		JPAG Service Road - Revegetate	6	ac	$ 3,000.00	ac	$ 18,000
		JPAG Service Road - Silt Fence	8,100	ft	$ 3.50	ft	$ 28,350
		Construction City/JPAG Service Road - Scarify	4	ac	$ 184.33	ac	$ 737
		Construction City/JPAG Service Road - Revegetate	4	ac	$ 3,000.00	ac	$ 12,000
		Construction City/JPAG Service Road - Silt Fence	5,200	ft	$ 3.50	ft	$ 18,200
		601 GM Service Road - Scarify	2	ac	$ 184.33	ac	$ 369
		601 GM Service Road - Revegetate	2	ac	$ 3,000.00	ac	$ 6,000
		601 GM Service Road -Silt Fence	3,100	ft	$ 3.50	ft	$ 10,850
		Indirect Costs					$ 14,974
		Contingency					$ 14,974
		Subtotal					**$ 279,512**
NPDES System Components							
	19 Pond						
		Revegetate/Stormwater	7	ac	$ 3,000.00	ac	$ 20,100
		Indirect Costs					$ 1,206
		Contingency					$ 1,206
		Subtotal					**$ 22,512**
	Events Pond						
		Revegetate/Stormwater	32		$ 3,000.00	ac	$ 94,500
		Indirect Costs					$ 5,670
		Contingency					$ 5,670
		Subtotal					**$ 105,840**
	TSF Impoundment						

		Revegetate Stormwater	26	ac	$ 3,000.00	ac	$	78,000
		Silt Fence	15,400	ft	$ 3.50	ft	$	53,900
		Indirect Costs					$	7,914
		Contingency					$	7,914
		Subtotal					**$**	**147,728**
Plant Site, Associated Infrastructure, and Other								
	WWTP							
		Revegetate Disturbed Area and Revegetate Stormwater	15	ac	$ 3,000.00	ac	$	45,300
		Indirect Costs					$	2,718
		Contingency					$	2,718
		Subtotal					**$**	**50,736**
	Plant Site							
		Revegetate/Stormwater	51	ac	$ 3,000.00	ac	$	152,100
		Silt Fence	14,400	ft	$ 3.50	ft	$	50,400
		Indirect Costs					$	9,126
		Contingency					$	12,150
		Subtotal					**$**	**223,776**
	Reclaim Construction City/Laydown Area							
		Revegetate	9	ac	$ 3,000.00	ac	$	27,000
		Silt Fence	7,800	ac	$ 3.50	ac	$	27,300
		Indirect Costs					$	3,258
		Contingency					$	3,258
		Subtotal					**$**	**60,816**
	Reclaim Guard Trailer Area							
		Revegetate	1	ac	$ 3,000.00	ac	$	3,000
		Indirect Costs					$	180
		Contingency					$	180
		Subtotal					**$**	**3,360**
	Temporary Mine Offices (Beverly Hills)							
		Revegetate	20	ac	$ 3,000.00	ac	$	60,000
		Silt Fence	4,300	ft	$ 3.50	ft	$	15,050
		Indirect Costs					$	3,600
		Contingency					$	4,503
		Subtotal					**$**	**83,153**
	Temporary Maintenance Facility							
		Revegetate	14	ac	$ 3,000.00	ac	$	42,000
		Conex Removal	4	ea	$ 400.00	ea	$	1,600
		Silt Fence	3,100	ft	$ 3.50	ft	$	10,850
		Dozer Push	12,000	cy	$ 0.39	cy	$	4,680
		Indirect Costs					$	2,616
		Contingency					$	2,616
		Subtotal					**$**	**64,362**
	Depressurization Well Abandonment							
		Abandon wells and piezometers	8	ea	$ 2,790.00	ea	$	22,320
		Indirect Costs					$	1,339
		Contingency					$	1,339
		Subtotal					**$**	**24,998**
	Temporary Power Poles							
		Remove Power Poles	41	ea	$ 150.00	ea	$	6,150
		Indirect Costs					$	369
		Contingency					$	369
		Subtotal					**$**	**6,888**
		Total					**$**	**1,219,904**

page 2 of 2

APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT
BY [signature]
TITLE Division Director
DATE APPROVED Nov 5, 2014
PERMIT NO. I-000601



LEGEND:

- EXISTING GROUND SURFACE CONTOUR EL, FEET
- EXISTING ROADS
- WATERS OF THE US
- PROPERTY NOT OWNED BY HAILE
- PROJECT BOUNDARY
- STORMWATER CONTROLS INSTALLED PER SWPPP
- ARCH SITE 38LA654 LOCUS 1

ALL HATCHING BELOW ASSUMES AREA HAS APPROPRIATE STORMWATER CONTROLS IN PLACE PER SWPPP AND HAS BEEN TIMBERED, CLEARED AND GRUBBED.

- TIMBERED, CLEARED, AND GRUBBED
- GRADING

NOTES:

1. THIS FIGURE DEPICTS THE LOCATION OF MINE FEATURES AFTER THE MINING PERMIT IS ISSUED AND BEFORE THE ROD IS ISSUED.
2. THE LOCATIONS SHOWN ON THIS DEPICTION MAY NOT BE EXACT AND MAY CHANGE SLIGHTLY DURING OPERATIONS, BUT REPRESENT THE BEST JUDGEMENT OF HAILE AT THIS TIME.
3. HAILE HAS PROPOSED THAT WETLANDS AND STREAMS WHICH ARE NOT AUTHORIZED FOR DISTURBANCE WILL HAVE A BUFFER AREA OF APPROXIMATELY 50 FEET, WHICH MAY NOT BE APPARENT ON THIS DEPICTION OF THE SITE FEATURES.

Reference:
Topographic information used is combined data given to AMEC from Haile Gold Mine, Inc. and USGS data. State Plane NAD 27.

Haile Gold Mine project boundary provided by HGM 04/03/2012.

Wetlands and Streamline information within the majority of the project boundary provided by Ecological Resource Consultants (ERC) in August 2012.

APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT
BY Kent M. Cooper
TITLE Division Director
DATE APPROVED Nov. 5 2014
PERMIT NO. I-000601

BOND-601-V2

PROJECT	HAILE GOLD MINE LANCASTER COUNTY, SOUTH CAROLINA
TITLE	HAILE GOLD MINE STAGE ONE BOND (PRE DEC 1ST) GENERAL LAYOUT

HAILE GOLD MINE HGM INCORPORATED

DESIGNED BY	CF	CHECKED BY	CB	DATE
DRAWN BY	CF	APPROVED BY	CB	10/13/14
FILENAME: STAGE ONE BOND		FIGURE No. 1		REV 0

Romarco Minerals - Haile Gold Mine
Reclamation & Closure Cost Estimates
Cost Breakdown Table (Stage 2 Only)

BOND - 601 - V3

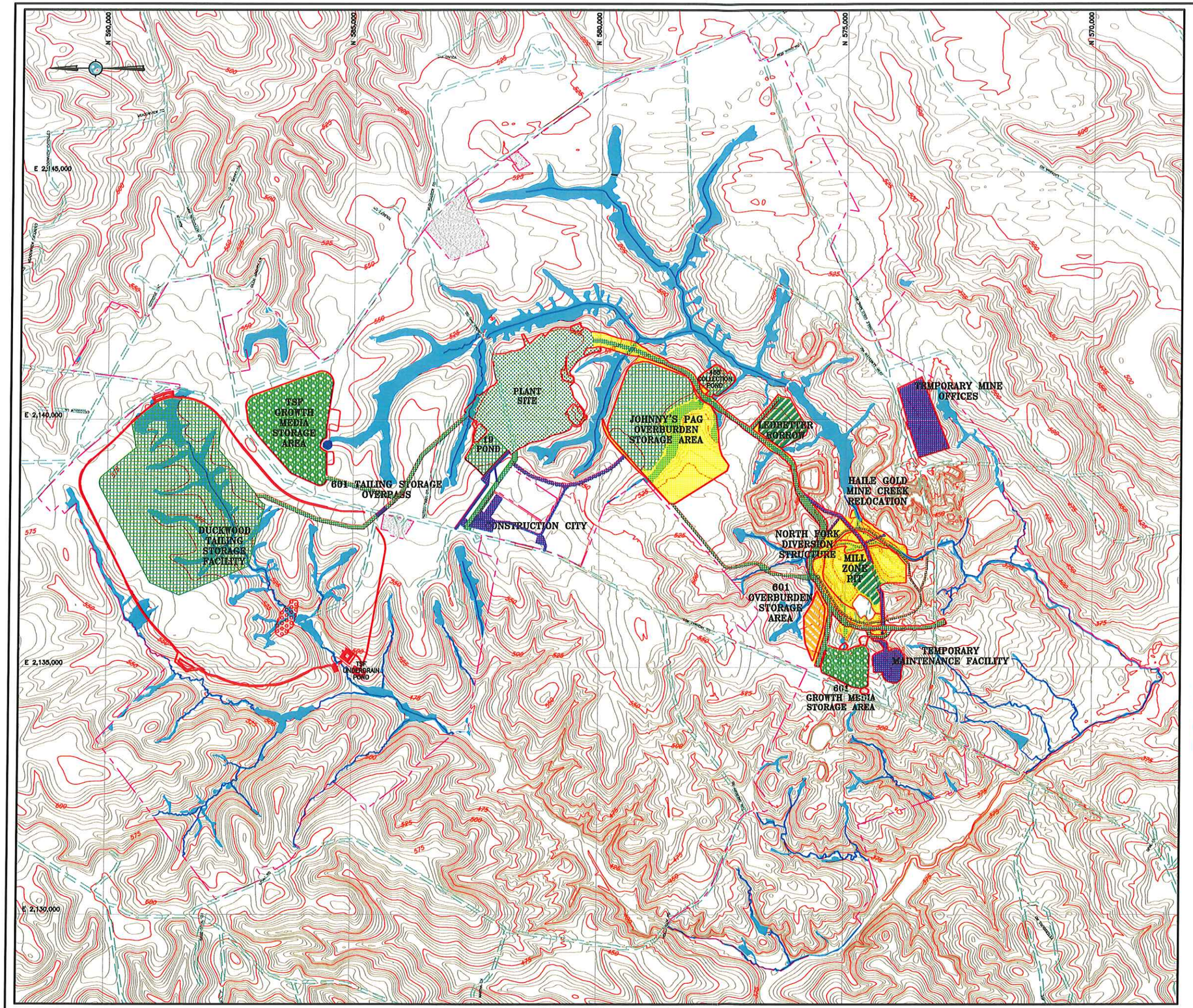
Facility		Item	Quantity	Units	Rate		Bonded Cost Stage 2
Open Pits							
	Mill Zone Pit						
		Revegetate	55	ac	$ 3,000.00	ac	$ 165,817
		Revegetate Pit Sed Pond Area	2	ac	$ 3,000.00	ac	$ 6,000
		Stream Restoration	1,943	lf	$ 225.00	lf	$ 437,213
		Indirect Costs					$ 36,542
		Contingency					$ 36,542
		Subtotal					**$ 682,114**
	Ledbetter Pit (Borrow area only)						
		Revegetate Stormwater Controls	3	ac	$ 3,000.00	ac	$ 10,200
		Revegetate	16	ac	$ 3,000.00	ac	$ 46,800
		RipRap Stormwater Spillway (Import and Place Riprap)	40	cy	$ 15.03	cy	$ 601
		Notch Outlet (Channel Excavation)	500	cy	$ 0.61	cy	$ 305
		Silt Fence	2,900	ft	$ 3.50	ft	$ 10,150
		Indirect Costs					$ 4,083
		Contingency					$ 4,083
		Subtotal					**$ 76,223**
OSAs							
	Johnny's PAG						
		Revegetate Phase 1a	53	ac	$ 3,000.00	ac	$ 81,620
		Revegetate Phases 1b and 1c	55	ac	$ 3,000.00	ac	$ 165,000
		Remove buried Groundwater pipes (Remove and Demo Pipeline)	1,800	lf	$ 1.75	lf	$ 3,150
		Reconnect Upstream channel (Stream Restoration)	100	lf	$ 225.00	lf	$ 22,500
		Remove ByPass Channel (Dozer Push)	11,671	cy	$ 0.39	cy	$ 4,552
		Indirect Costs					$ 16,609
		Contingency					$ 16,609
		Subtotal					**$ 310,040**
	601 OSA						
		Revegetate Stormwater	2	ac	$ 3,000.00	ac	$ 6,231
		Revegetate	8	ac	$ 3,000.00	ac	$ 24,995
		Indirect Costs					$ 1,874
		Contingency					$ 1,874
		Subtotal					**$ 34,973**
Growth Media Storage Areas							
	601 GMS						
		Scarify	15	ac	$ 184.33		$ 2,765
		Revegetate	15	ac	$ 3,000.00	ac	$ 45,000
		Indirect Costs					$ 2,866
		Contingency					$ 2,866
		Subtotal					**$ 53,497**
	TSF GMS						
		Scarify	62	ac	$ 184.33	ac	$ 11,428
		Revegetate	62	ac	$ 3,000.00	ac	$ 186,000
		Indirect Costs					$ 11,846
		Contingency					$ 11,846
		Subtotal					**$ 221,120**
Surface Water Management							
	North Fork Diversion						
		Revegetate Stormwater	1	ac	$ 3,000.00	ac	$ 3,000
		Stream Restoration	1,124	lf	$ 225.00	lf	$ 252,790
		Remove Culvert and Regrade	658	lf	$ 11.40	lf	$ 7,501
		Remove and Demo Pipeline	1,500	ft	$ 1.75	lf	$ 2,625
		Revegetate	2	ac	$ 3,000.00	ac	$ 6,000
		Indirect Costs					$ 16,315
		Contingency					$ 16,315
		Subtotal					**$ 304,546**

	HGM Crk Diversion							
		Revegetate Stormwater	6	ac	$ 3,000.00	ac	$	18,000
		Misc Rework (Channel Excavation + Dozer Push)	5,000	cy	$ 1.00	cy	$	5,000
		Stream Restoration (original creek)	250	lf	$ 225.00	lf	$	56,250
		Revegetate	6	ac	$ 3,000.00	ac	$	18,000
		Silt Fence	4,200	ft	$ 3.50	ft	$	14,700
		Indirect Costs					$	6,717
		Contingency					$	6,717
		Subtotal					**$**	**125,384**
Roads								
		JPAG Pipeline/Depres. Service Road - Scarify	20	ac	$ 184.33	ac	$	3,687
		JPAG Pipeline/Depres. Service Road - Revegetate	20	ac	$ 3,000.00	ac	$	60,000
		JPAG Pipeline/Depres. Service Road Culvert	1,205	lf	$ 11.40	lf	$	13,737
		JPAG Pipeline/Depres. Service Road - Stream Rest.	354	ft	$ 225.00	ft	$	79,644
		JPAG Pipeline/Depres. Service Road -Silt Fence	19,600	ft	$ 3.50	ft	$	68,600
		Indirect Costs					$	13,540
		Contingency					$	13,540
		Subtotal					**$**	**252,748**
	Construction Roads		*** Stormwater controls included in acres**					
		West MZ Construction Road - Scarify	2	ac	$ 184.33	ac	$	369
		West MZ Construction Road - Revegetate	2	ac	$ 3,000.00	ac	$	6,000
		West MZ Construction Road - Silt Fence	3,900	ft	$ 3.50	ft	$	13,650
		East MZ Construction Road - Scarify	4	ac	$ 184.33	ac	$	737
		East MZ Construction Road - Revegetate	4	ac	$ 3,000.00	ac	$	12,000
		East MZ Construction Road - Silt Fence	1,700	ft	$ 3.50	ft	$	5,950
		East MZ Const Rd Culvert	171	lf	$ 11.40	lf	$	1,949
		Ledbetter Const. Road - Scarify	2	ac	$ 184.33	ac	$	369
		Ledbetter Const. Road - Revegetate	2	ac	$ 3,000.00	ac	$	6,000
		Ledbetter Const. Road - Silt Fence	800	ft	$ 3.50	ft	$	2,800
		Diversion Road - Scarify	1	ac	$ 184.33	ac	$	184
		Diversion Road - Revegetate	1	ac	$ 3,000.00	ac	$	3,000
		Diversion Road Culvert	142	lf	$ 11.40	lf	$	1,619
		Diversion Road - Silt Fence	1,000	ft	$ 3.50	ft	$	3,500
		NF Construction Road - Scarify	1	ac	$ 184.33	ac	$	184
		NF Construction Road - Revegetate	1	ac	$ 3,000.00	ac	$	3,000
		NF Construction Road - Silt Fence	1,000	ft	$ 3.50	ft	$	3,500
		TSF Construction Road - Scarify	10	ac	$ 184.33	ac	$	1,843
		TSF Construction Road - Revegetate	10	ac	$ 3,000.00	ac	$	30,000
		TSF Construction Road - Silt Fence	10,900	ft	$ 3.50	ft	$	38,150
		TSF Constr Road Culvert	400	lf	$ 11.40	lf	$	4,560
		TSF Constr Road Stream Restoration	400	lf	$ 225.00	lf	$	90,000
		TSF GMS Construction Rd - Scarify	3	ac	$ 184.33	ac	$	553
		TSF GMS Construction Road - Revegetate	3	ac	$ 3,000.00	ac	$	9,000
		TSF GMS Construction Road - Silt Fence	2,900	ft	$ 3.50	ft	$	10,150
		Indirect Costs					$	14,944
		Contingency					$	14,944
		Subtotal					**$**	**278,956**
	Haul Roads							
		601 to Pads Haul Road - Scarify	19	ac	$ 184.33	ac	$	3,502
		601 to Pads Haul Road - Revegetate	19	ac	$ 3,000.00	ac	$	57,000
		601 to Pads Culvert (included in NF div)	0	lf	$ 11.40	lf	$	-
		601 to Pads Road Stream Restoration (all in NF Div)	0	lf	$ 225.00	lf	$	-
		601 to Pads Road - Silt Fence	7,200	ft	$ 3.50	ft	$	25,200
		601 GM to Intersection Haul Road - Scarify	4	ac	$ 184.33	ac	$	737
		601 GM to Intersection Haul Road - Revegetate	4	ac	$ 3,000.00	ac	$	12,000
		601 GM to Intersection Haul Road - Silt Fence	2,500	ft	$ 3.50	ft	$	8,750
		Pads to Crusher Haul Road - Scarify	28	ac	$ 184.33	ac	$	5,161
		Pads to Crusher Haul Road - Revegetate	28	ac	$ 3,000.00	ac	$	84,000
		Pads to Crusher Road culvert	1,107	lf	$ 11.40	lf	$	12,620
		Pads to Crusher Road Stream Restoration	420	lf	$ 225.00	lf	$	94,500
		Pads to Crusher Road - Silt Fence	10,500	ft	$ 3.50	ft	$	36,750
		Ramona Haul Road - Scarify	8	ac	$ 184.33	ac	$	1,475
		Ramona Haul Road - Revegetate	8	ac	$ 3,000.00	ac	$	24,000
		Ramona Haul Road - Silt Fence	3,800	ft	$ 3.50	ft	$	13,300
		Indirect Costs					$	22,740
		Contingency					$	22,740
		Subtotal					**$**	**424,475**
	Snowy Owl							
		Revegetate	4	ac	$ 3,000.00	ac	$	13,013

		Indirect Costs					$ 781
		Contingency					$ 781
		Subtotal					**$ 14,575**
NPDES System Components							
	19 Pond						
		Fill in excavation	115,500	cy	$ 2.26	cy	$ 261,030
		Indirect Costs					$ 15,662
		Contingency					$ 15,662
		Subtotal					**$ 292,354**
	465 Pond						
		Fill in excavation	125,000	cy	$ 2.26	cy	$ 282,500
		Revegetate/Stormwater	9	ac	$ 3,000.00	ac	$ 27,000
		Indirect Costs					$ 18,570
		Contingency					$ 18,570
		Subtotal					**$ 346,640**
	Events Pond						
		Fill in excavation	8,170		$ 2.26	cy	$ 18,464
		Indirect Costs					$ 1,108
		Contingency					$ 1,108
		Subtotal					**$ 20,680**
	Pipelines						
		Demo HDPE pipeline (MZ Pit to 19 Pond)	4,800	ft	$ 1.75	ft	$ 8,400
		Demo HDPE pipeline (465 to 19 Pond)	4,200	ft	$ 1.75	ft	$ 7,350
		Demo HDPE pipeline (WWTP to 003)	3,950	ft	$ 1.75	ft	$ 6,913
		Indirect Costs					$ 1,360
		Contingency					$ 1,360
		Subtotal					**$ 25,382**
	TSF Impoundment						
		Remove Coffer Dam	11,000	cy	$ 0.39	cy	$ 4,290
		Stream Restoration	5,200	lf	$ 225.00	lf	$ 1,170,000
		Revegetate	198	ac	$ 3,000.00	ac	$ 594,000
		Indirect Costs					$ 106,097
		Contingency					$ 106,097
		Subtotal					**$ 1,980,485**
Plant Site, Associated Infrastructure, and Other							
	WWTP						
		Rubilize concrete slab for WWTP (Concrete Demolition)	514	CY	$ 8.00	CY	$ 4,112
		Bury concrete in place (Import Soil and LGB push)	514	Cy	$ 2.26	Cy	$ 1,162
		Indirect Costs					$ 316
		Contingency					$ 316
		Subtotal					**$ 5,906**
	Depressurization Well Abandonment						
		Demo Depressurization Lines	15,351	ft	$ 1.75	ft	$ 26,864
		Indirect Costs					$ 1,612
		Contingency					$ 1,612
		Subtotal					**$ 30,088**
	601 Tailing Storage Overpass						
		Remove Bridge Supports	1	ls	$ 64,680.00	ea	$ 64,680
		Indirect Costs					$ 3,881
		Contingency					$ 3,881
		Subtotal					**$ 72,442**
		Total					**$ 5,552,626**

page 3 of 3

APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT
BY Kat M. Cole
TITLE Division Director
DATE APPROVED Nov 5 2014
PERMIT NO. I-000601



LEGEND:

- EXISTING GROUND SURFACE CONTOUR EL, FEET
- EXISTING ROADS
- 601 OVERPASS CONSTRUCTED WITHOUT RAMPS
- WATERS OF THE US
- PROJECT BOUNDARY
- PROPERTY NOT OWNED BY HAILE
- ARCH SITE 38LA654 LOCUS 1
- STORMWATER CONTROLS INSTALLED PER SWPPP

ALL HATCHING BELOW ASSUMES AREA HAS APPROPRIATE STORMWATER CONTROLS IN PLACE PER SWPPP AND HAS BEEN TIMBERED, CLEARED AND GRUBBED.

- TIMBERED, CLEARED, AND GRUBBED
- GRADING
- EXCAVATION OCCURING
- GRADING CONTINUES WITH UNDERGROUND UTILITIES INSTALLATION
- RECEIVING GROWTH MEDIA
- OSA READY TO RECEIVE MATERIAL
- COFFER DAM INSTALLATION
- EARTHWORK COMPLETE

NOTES:

1. THIS FIGURE DEPICTS THE LOCATION OF MINE FEATURES 90 DAYS AFTER THE ROD IS ISSUED. IF A MINE FEATURE COVERS AN EXISTING FEATURE, BE IT A ROAD OR WETLAND, IT IS CONSIDERED DIRECTLY IMPACTED. WETLANDS ARE SHOWN UNDER MINE FEATURES FOR REFERENCE.
2. THE LOCATIONS SHOWN ON THIS DEPICTION MAY NOT BE EXACT AND MAY CHANGE SLIGHTLY DURING OPERATIONS, BUT REPRESENT THE BEST JUDGEMENT OF HAILE AT THIS TIME.
3. HAILE HAS PROPOSED THAT WETLANDS AND STREAMS WHICH ARE NOT AUTHORIZED FOR DISTURBANCE WILL HAVE A BUFFER AREA OF APPROXIMATELY 50 FEET, WHICH MAY NOT BE APPARENT ON THIS DEPICTION OF THE SITE FEATURES.

Reference:
Topographic information used is combined data given to AMEC from Haile Gold Mine, Inc. and USGS data. State Plane NAD 27.

Haile Gold Mine project boundary provided by HGM 04/03/2012.

Wetlands and Streamline Information within the majority of the project boundary provided by Ecological Resource Consultants (ERC) in August 2012.

APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT
BY Karl M. Coleman
TITLE Division Director
DATE APPROVED Nov 5, 2014
PERMIT NO. I-000601

BOND-601-V4

PROJECT: HAILE GOLD MINE
LANCASTER COUNTY, SOUTH CAROLINA

TITLE: HAILE GOLD MINE
STAGE TWO BOND (90 DAYS POST DEC 1ST)
GENERAL LAYOUT

HAILE GOLD MINE HGM INCORPORATED

DESIGNED BY	CF	CHECKED BY	CB	DATE
DRAWN BY	CF	APPROVED BY	CB	10/13/14
FILENAME: STAGE TWO BOND		FIGURE No. 1		REV 0

BOND-601-V5

Romarco Minerals - Haile Gold Mine
Reclamation and Closure Cost Estimates
Posted Assurance Amount Summary Table

Assurance Annual Breakdown (thousand $)

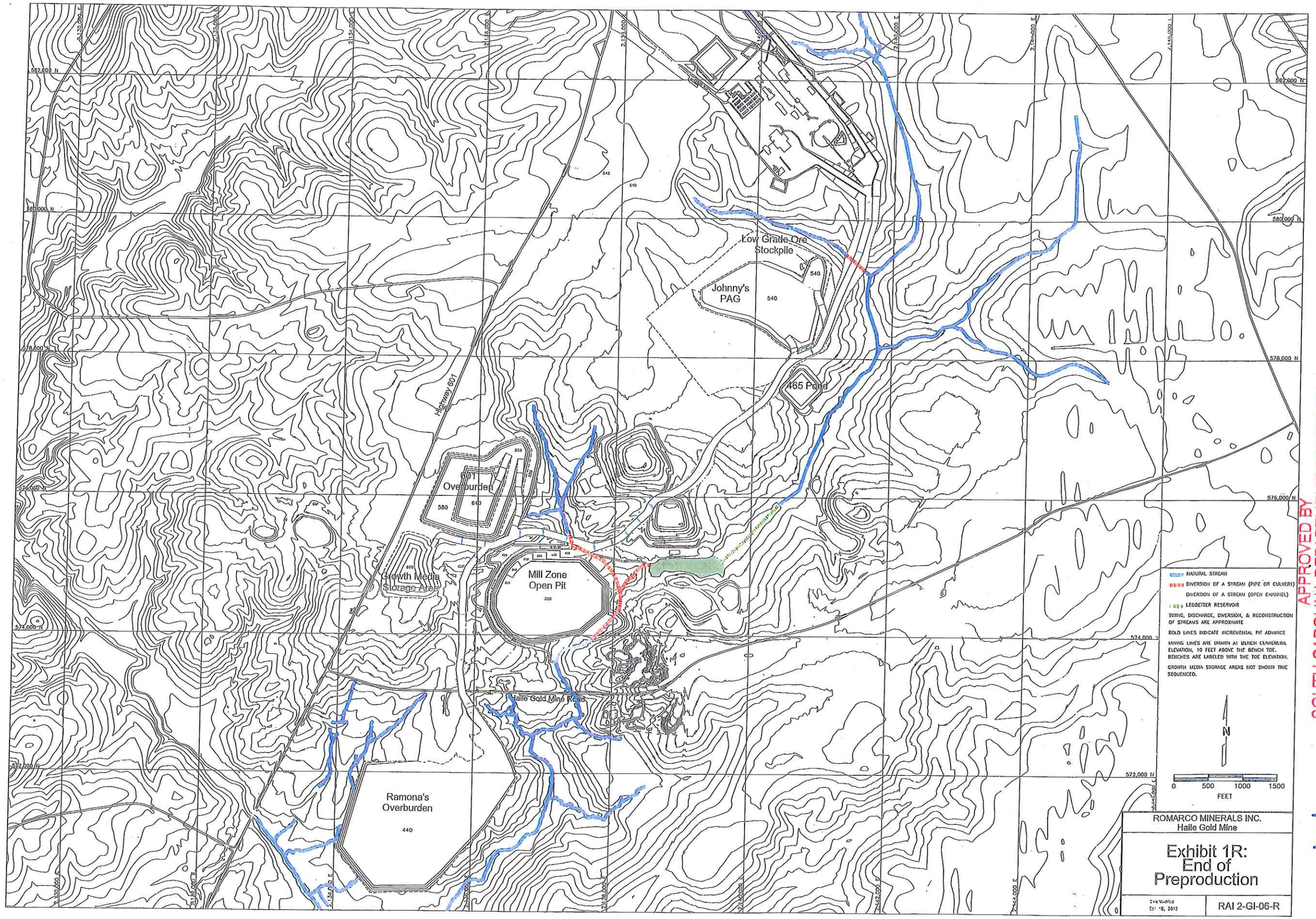
Facility	Assurance (thousand $)	Year Operations Begin	PP	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	YR 11	YR 12	YR 13	YR 14	YR 15	YR 16	YR 17	YR 18	YR 19	YR 20
Total Financial Assurance Amount (Bond plus Trust)	60,000		$30,200	3,366	3,574	5,793	8,347	400	532	4,334	1,549	400	605	400	400	100	-	-	-	-	-	-	-
Bond	55,000		30,100	2,966	3,174	5,393	7,947	-	132	3,934	1,149	-	205	-	-	-							
Open Pits																							
Mill Zone Pit	269	PP	269	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haile Pit	229	3	-	-	229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Hill Pit	206	4	-	-	-	206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledbetter Pit (Earthworks)	51	4	-	-	-	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Snake Pit (Earthworks)	206	1	206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chase Pit	132	7	-	-	-	-	-	-	132	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Champion Pit (Earthworks)	2	9	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
Small Pit (Earthworks)	2	11	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Overburden Areas																							
Johnny's PAG	9,922	Multiple Phases	6,152	-	-	-	3,770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Johnny's PAG Water Management	16	PP	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
601 OSA	219	PP	219	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ramona OSA	1,038	PP	1,038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hayworth OSA	579	3	-	-	579	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hilltop OSA	420	3	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
James OSA	445	2	-	445	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Robert OSA	524	1	524	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Site Surface Water Management																							
Stormwater and contact water controls	189	PP	189	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Re-establish Drainages	1,040	PP	1,040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF																							
TSF Impoundment	16,160	Multiple Phases	12,928	-	1,083	-	1,083	-	-	1,067	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF Outlet Notch	103	Multiple Phases	83	-	7	-	7	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF Downchute	9	Multiple Phases	7	-	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Mill Site and Associated Infrastructure																							
Dismantle Plant and Mill and Water Treatment Plant	773	PP	773	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reclaim Mill Site	385	PP	385	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Service/Construction Roads	401	PP	401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roads, Powerlines and Other Facilities																							
Remove Haul Roads	366	PP	366	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Powerlines	214	PP	214	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines	140	PP	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Media Stockpiles and Borrow Areas	896	PP	896	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HGMC Detention and Diversion Structure	57	4	-	-	-	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Well Abandonment	166	PP	166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Passive Treatment System Construction																							
JPAG Passive Cell Constrution	915	20	567	-		-	348	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF Passive Cell Construction	551	36	551	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater Treatment (JPAG + TSF)																							
JPAG Wastewater Treatment	400	PP	248	-	-	-	152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF Wastewater Treatment	8,072	PP	-	2,521	-	1,670	2,587	-	-	1,295	-	-	-	-	-	-	-	-	-	-	-	-	-
Operational Contingency																							
South Pit Wall Grading &Reveg (Year 7 Scenario)	2,603	Multiple Phases	868	-	868	868	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lime Addition to South Pit (Year 7 Scenario)	-	Note 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Closure (11-37)																							
Mine Site Closure Maintenance and Monitoring	1,345	PP	1,293	-	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF Site Closure Maintenance and Monitoring	626	PP	626	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledbetter Pit Lake	4,172	3	-	-	-	2,606	-	-	-	1,566	-	-	-	-	-	-	-	-	-	-	-	-	-
Small Pit Lake	203	10		-			-	-	-	-	-	-	203	-	-	-	-	-	-	-	-	-	-
Champion Pit Lake	956	8	(64)	-	(64)	(64)	-	-	-	-	1,147	-	-	-	-	-	-	-	-	-	-	-	-
Maintenance and Monitoring Post Closure Trust	**5,000**	**PP**	100	400	400	400	400	400	400	400	400	400	400	400	400	100							

Note 1: Ledbetter Pit Lake (LOM Lime) is 11, 200 tons. If mining ceases in Year 7, Ledbetter only needs 7,700 tons of lime. South Pit is estimated to need 3,100 tons of lime in Year 7, so the excess from Ledbetter plus moving up the bonding timing for lime projection for Champion Pit is adequate to cover the South Pit lime needs.

Romarco Minerals - Haile Gold Mine
Reclamation and Closure Cost Estimates
Posted Assurance Amount Summary Table

Facility	Assurance (thousand $)	Year Operations Begin	YR 21	YR 22	YR 23	YR 24	YR 25	YR 26	YR 27	YR 28	YR 29	YR 30	YR 31	YR 32	YR 33	YR 34	YR 35	YR 36	YR 37
Total Financial Assurance Amount (Bond plus Trust)	60,000		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bond	55,000																		
Open Pits																			
Mill Zone Pit	269	PP	-	-	-	-	-	-	-	-	-	-	-						
Haile Pit	229	3	-	-	-	-	-	-	-	-	-	-	-						
Red Hill Pit	206	4	-	-	-	-	-	-	-	-	-	-	-						
Ledbetter Pit (Earthworks)	51	4	-	-	-	-	-	-	-	-	-	-	-						
Snake Pit (Earthworks)	206	1	-	-	-	-	-	-	-	-	-	-	-						
Chase Pit	132	7	-	-	-	-	-	-	-	-	-	-	-						
Champion Pit (Earthworks)	2	9	-	-	-	-	-	-	-	-	-	-	-						
Small Pit (Earthworks)	2	11	-	-	-	-	-	-	-	-	-	-	-						
Overburden Areas																			
Johnny's PAG	9,922	Multiple Phases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Johnny's PAG Water Management	16	PP	-	-	-	-	-	-	-	-	-	-	-						
601 OSA	219	PP	-	-	-	-	-	-	-	-	-	-	-						
Ramona OSA	1,038	PP	-	-	-	-	-	-	-	-	-	-	-						
Hayworth OSA	579	3	-	-	-	-	-	-	-	-	-	-	-						
Hilltop OSA	420	3	-	-	-	-	-	-	-	-	-	-	-						
James OSA	445	2	-	-	-	-	-	-	-	-	-	-	-						
Robert OSA	524	1	-	-	-	-	-	-	-	-	-	-	-						
Site Surface Water Management																			
Stormwater and contact water controls	189	PP	-	-	-	-	-	-	-	-	-	-	-						
Re-establish Drainages	1,040	PP	-	-	-	-	-	-	-	-	-	-	-						
TSF																			
TSF Impoundment	16,160	Multiple Phases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF Outlet Notch	103	Multiple Phases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF Downchute	9	Multiple Phases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mill Site and Associated Infrastructure																			
Dismantle Plant and Mill and Water Treatment Plant	773	PP	-	-	-	-	-	-	-	-	-	-	-						
Reclaim Mill Site	385	PP	-	-	-	-	-	-	-	-	-	-	-						
Service/Construction Roads	401	PP	-	-	-	-	-	-	-	-	-	-	-						
Roads, Powerlines and Other Facilities																			
Remove Haul Roads	366	PP	-	-	-	-	-	-	-	-	-	-	-						
Powerlines	214	PP	-	-	-	-	-	-	-	-	-	-	-						
Pipelines	140	PP	-	-	-	-	-	-	-	-	-	-	-						
Growth Media Stockpiles and Borrow Areas	896	PP	-	-	-	-	-	-	-	-	-	-	-						
HGMC Detention and Diversion Structure	57	4	-	-	-	-	-	-	-	-	-	-	-						
Well Abandonment	166	PP	-	-	-	-	-	-	-	-	-	-	-						
Passive Treatment System Construction																			
JPAG Passive Cell Constrution	915	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF Passive Cell Construction	551	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater Treatment (JPAG + TSF)																			
JPAG Wastewater Treatment	400	PP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF Wastewater Treatment	8,072	PP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operational Contingency																			
South Pit Wall Grading &Reveg (Year 7 Scenario)	2,603	Multiple Phases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lime Addition to South Pit (Year 7 Scenario)	-	Note 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Closure (11-37)																			
Mine Site Closure Maintenance and Monitoring	1,345	PP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TSF Site Closure Maintenance and Monitoring	626	PP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledbetter Pit Lake	4,172	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Small Pit Lake	203	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Champion Pit Lake	956	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maintenance and Monitoring Post Closure Trust	**5,000**	**PP**																	

APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT
BY _____
TITLE Division Director
DATE APPROVED Nov. 5, 2014
PERMIT NO. I-000601



APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT
BY [signature]
TITLE Division Director
DATE APPROVED Nov 5 2014
PERMIT NO. I-000601

BOND-601-V6

RECEIVE
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DIVISION OF MINING
SOLID WASTE MANAGEM
BL&WM