



Fill continues to be placed and compacted by method specification. A GPS dozer was observed shaping the western downstream slope of the embankment. (See Fill section above for more detail)

## **II) Storm Water Management**

Best Management Practices (BMP) are being performed.

### **CQA ACTIVITIES:**

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- I) **Field Activities:** Construction activities and observation of production drilling, Cut, HWY 67 embankment fill placement and compaction, clay field sampling were performed during this reporting period as required per project specifications.
- II) **Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and identifications and material sampling were performed during this reporting period as required.

LVSCF sample No.'s 23 thru 30 were obtained during this reporting period.

### **General Project Items**

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on July 16<sup>th</sup> between CC&V, Ames and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.

**Summary of Concerns:** None

**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.

**Miscellaneous:** None

**Deliveries:** None

### **CQA Monitor**

**Submitted by:** Thorne M. Clark

**Date:** 07.20.13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

**Approved By:** Scott R. [Signature]

**Date:** 8-19-13



**ATTACHMENT A**

**AMEC - 2013 CQA Field Staff Schedule MLE2**

<b>Name</b>	<b>July 14</b>	<b>July 15</b>	<b>July 16</b>	<b>July 17</b>	<b>July 18</b>	<b>July 19</b>	<b>July 20</b>
Thorne Clark	-	PR	PR	PR	PR	PR	-
Steve Rice	-	LS	LS	LS	LS	-	LS
Uwe Kelley	-	ST	-	-	ST	ST	ST
Ben Melly	-	LG	LG	LG	LG	LG	LG
Robert Redd	-	ST	ST	ST	ST	ST	ST
Ryan Fesler	-	LT	LT	LT	LT	LT	LT
*Kevin Duarte	-	ST	ST	ST	ST	ST	ST
Razi Molloy	-	LT	LT	LT	LT	LT	LT
*Max Jessen		-	-	ST	ST	-	-
Eric Lorensen	-	-	ST	ST	ST	ST	ST
Mike Nelson	-	-	-	-	-	-	-

\*Night shift

**LEGEND**

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
SE = Senior Engineer

**Photographs of daily activities:**

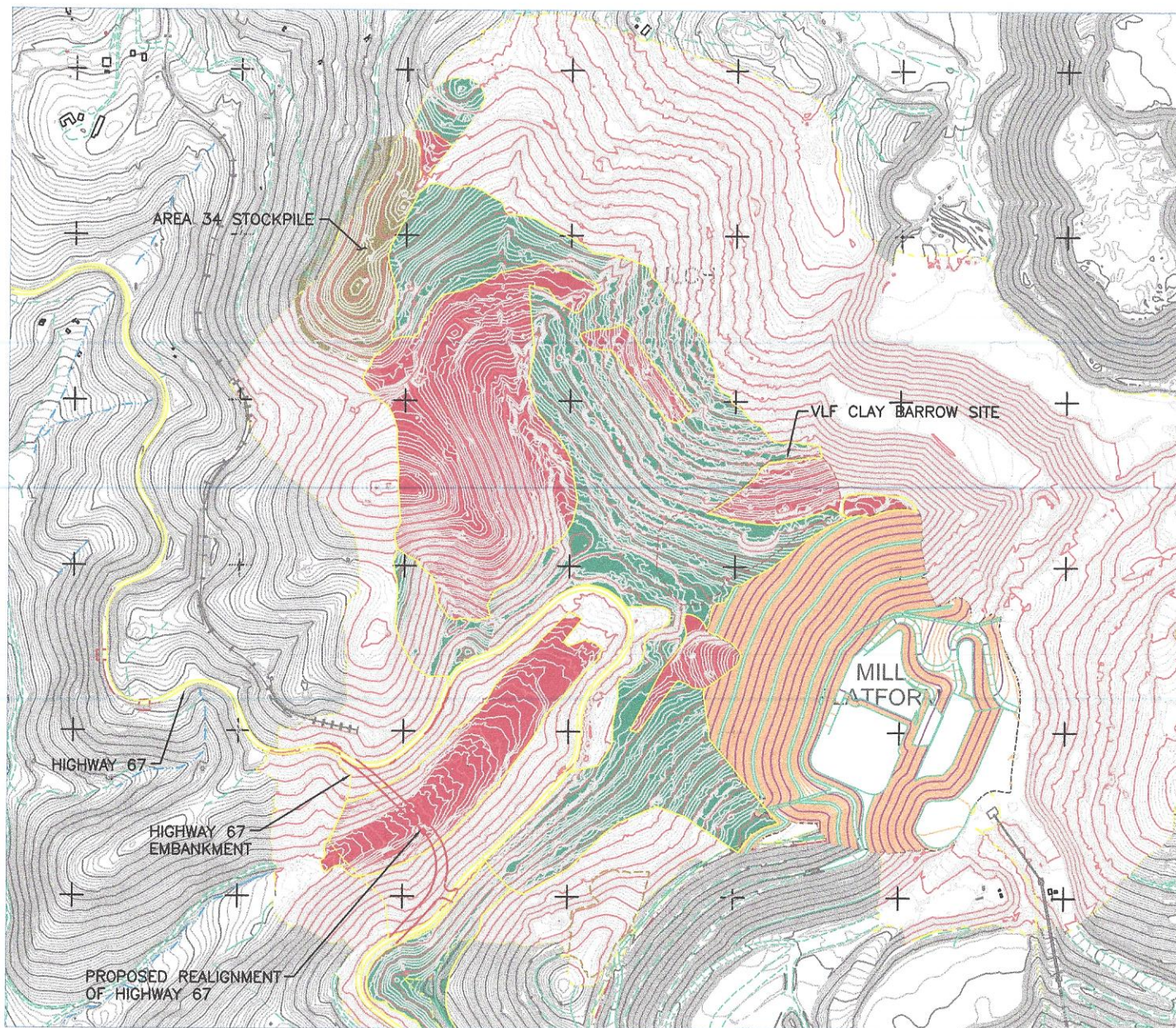


**Photo 1:** VLF site Overview



**Photo 2:** Hwy 67 embankment – Structural fill placement, compaction and slope contouring





### **LEGEND:**

- AREA OF CUT AND FILL
- CLEARING AND GRUBBING
- TOPSOIL STOCKPILE

### **NOTE:**

AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.

CLIENT	CRIPPLE CREEK & VICTOR GOLD MINING COMPANY			
PROJECT	MLE 2 SQUAW GULCH			
TITLE	CLEARING, GRUBBING AND FILL AREAS			
DESIGNED BY	TMC	CHECKED BY	RRR	DATE
DRAWN BY	RRR	APPROVED BY	TMC	7/30/13
FILENAME	—	FIGURE No.	1	REV
				A

**amec**





**CRIPPLE CREEK & VICTOR GOLD MINING Co.**  
**Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**

<b>Owner:</b> Cripple Creek & Victor Gold Mining Co.	<b>Project Number:</b> 74201125N0. ****. ****	<b>Date:</b> 07.27.2013
<b>Project:</b> Squaw Gulch (VLF), Hwy 67 Realignment		
<b>Location:</b> Cripple Creek & Victor Gold Mine, Colorado		
<b>Contractor:</b> Ames Construction Co. Inc.		

**Reporting Period: 07.21.13 thru 07.27.13**

Days	S	M	T	W	T	F	S
Work Shifts	-	D	D	D	D	D	D
	-	N	N	N	N	N	N
D = Day Shift   N = Night Shift   W = Weather Day							

**Ambient Temperature Ranges for reporting period:**

**Low:** 42°F – 49°F

**High:** 70°F – 78°F

**Weather conditions for reporting period:**

**Cloud Cover:** Clear / partly Cloudy

**Precipitation:** P.M. Light Rain/Mostly Zero Precip.

**Wind:** Calm to Gusts at times

**Ames:** None

**Amec:** None

**Project Issues:** None

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**I) Earthworks**

**A) VLF (Phase I)**

**Topsoil Stripping:** No topsoil stripping occurred during this reporting period.

**Production drilling** was performed during this reporting period in several locations within the planned VLF Phase I and PSSA limits, continued at the Phase II detention pond location and at the South Crib Wall.

**Five production blasts'** occurred during this reporting period within the planned VLF Phase I limit's, South Crib Wall location and at the Phase II detention pond. Material generated as "cut" material was used as structural fill using several Cat dozers and transported by several Cat 777 and 740 haul trucks to be used for the HWY 67 embankment.

**Structural Fill:** An Amec field representative observed the placement and compaction of structural fill for the HWY 67 embankment. (See Figure 1). A Cat D10 and a Cat D8 were utilized to push and place structural fill in 18 to 24 inch loose lifts. Each lift was compacted with a minimum of 4 passes (by Method specification) using a Cat 563 smooth drum roller. In addition Cat 777 and Cat 740 haul traffic contributed to the compaction efforts. It should be noted; a Cat 330 hammer hoe was used to split rock in excess of 24-inches, prior to compaction efforts.

In addition to the structural fill placement for the HWY 67/PSSA embankment, the contractor began placing structural fill at the mid-way ADR haul road location at approximate Sta.43+00 – 44+00. Progress is expected to continue.



An Amec field representative monitored structural fill material temperatures placed within the Hwy 67 embankment during all shifts. Average structural fill temperatures were above 32°F

#### Clay (SLF) Processing:

**Cameron Site:** No clay mining occurred during this reporting period due to a saturated site from previous rains. It should be noted: Clay processing occurred and *SLF sample No. 44* was obtained and returned to our Laboratory for gradation analysis and permeability testing.

#### **Squaw Gulch Site:**

No work occurred at the VLF clay borrow site during this reporting period.

#### Underdrain System:

**Secondary Underdrain:** No work was performed on the Secondary underdrain during this reporting period.

A total of 1380 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** Temporary underdrain pipe is installed thru the embankment. No other work occurred during this reporting period.

#### **Underdrain Ponds:**

Concrete for the underdrain Ponds are complete. No other work was performed.

#### **Tree /Slash Clearing, Chipping:**

Seed Masters resumed operations during this reporting period and is expected to continue chipping stockpiled trees and slash within the VLF area.

### **B) Underground Workings**

Confirmatory drilling was not performed during this reporting period.

During this reporting period exploratory excavation was performed on UG working No. 6239. Site listed continued further investigation excavation into bedrock as remediation continues or completed during the reporting period as specified.

Following a walk through of the planned Phase 2 Diversion ditch area, it was determined that approximately 21 workings are located within the planned ditch and perimeter road. These sites are to be located and verified once right-of-way and clearing of trees and brush are performed.

During this reporting period remediation efforts were performed and completed on UG working No. U6240, No. 6242, No. 6243, No. 6244, No. 6246, No. 6247, No. 6248, No. 6249 and No. 6250. Sites listed were excavated to practical refusal into rock varying depths depending on the working remediated. The site for each working was then backfilled in 2 foot loose lifts to approximate planned subgrade elevation using the onsite structural fill (excavated material) and "bucket tamped" with the back of the CAT 330 excavator bucket. All backfill material was free of organic material, ice and snow and are considered remediated as specified.

### **C) Highway 67**





Fill continues to be placed and compacted by method specification. A GPS dozer was observed shaping the western downstream slope of the embankment. (See "Structural Fill" above)

## **II) Storm Water Management**

Best Management Practices (BMP) are being performed.

### **CQA ACTIVITIES:**

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- I) **Field Activities:** Construction activities and observation of production drilling, Cut, HWY 67 embankment fill placement and compaction, field sampling were performed during this reporting period as required per project specifications.
- II) **Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and identifications and material sampling were performed during this reporting period as required.

LVSCF sample No.'s 31 thru 42 were obtained during this reporting period.

### **General Project Items**

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on July 23<sup>rd</sup> between CC&V, Ames and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.

**Summary of Concerns:** None

**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.

**Miscellaneous:** None


**Deliveries:** None

**CQA Monitor**

**Submitted by:** Thorne M. Clark

**Date:** 07.27.13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

**Approved By:** 

**Date:** 8-19-13



## ATTACHMENT A

### AMEC - 2013 CQA Field Staff Schedule MLE2

Name	July 21	July 22	July 23	July 24	July 25	July 26	July 27
Thorne Clark	-	PR	PR	PR	PR	PR	PR
Steve Rice	-	LS	LS	LS	LS	LS	-
Uwe Kelley	-	ST	ST	ST	ST	ST	-
Ben Melly	-	LG	LG	LG	LG	LG	-
Robert Redd	-	ST	ST	ST	ST	ST	ST
Ryan Fesler	-	LT	LT	LT	LT	LT	LT
*Kevin Duarte	-	ST	ST	ST	ST	ST	ST
Razi Molloy	-	LT	LT	LT	LT	LT	LT
Eric Lorensen		ST	ST	ST	ST	ST	-
Mike Nelson	-	-	-	-	-	-	-
	-	-	-	-	-	-	-

\*Night shift

### LEGEND

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
SE = Senior Engineer



***Photographs of daily activities:***



***Photo 1: VLF site Overview***



***Photo 2: Site Overview Hwy 67/PSSA embankment***



**Photo 3:** Crusher operations



**Photo 4:** Midway – ADR Haul road fill placement





- AREA OF CUT AND FILL  
CLEARING AND GRUBBING  
TOPSOIL STOCKPILE

**NOTE:**


AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.

CRIPPLE CREEK & VICTOR  
GOLD MINING COMPANY

### MLE 2 SQUAW GULCH

**CLEARING, GRUBBING AND FILL AREAS**



	DESIGNED BY	TWC	CHECKED BY	RSR	DATE	
	DRAWN BY	RSR	APPROVED BY	TWC	7/27/15	
FILENAME			FIGURE No.		1	REV
						A





**CRIPPLE CREEK & VICTOR GOLD MINING Co.  
Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**

<b>Owner:</b>	Cripple Creek & Victor Gold Mining Co.	<b>Project Number:</b>	<b>Date</b>
<b>Project:</b>	Squaw Gulch (VLF), Hwy 67 Realignment	74201125N0. ****. ****	08.03.2013
<b>Location:</b>	Cripple Creek & Victor Gold Mine, Colorado		
<b>Contractor:</b>	Ames Construction Co. Inc.		

**Reporting Period: 07.28.13 thru 08.03.13**

Days	S	M	T	W	T	F	S
Work Shifts	-	D	D	D	D	D	D
D = Day Shift	-	N	N	N	N	N	N
N = Night Shift W = Weather Day							

**Ambient Temperature Ranges for reporting period:**

**Low:** 45°F – 50°F

**High:** 67°F – 76°F

**Weather conditions for reporting period:**

**Cloud Cover:** Clear / partly Cloudy

**Precipitation:** P.M. Light Rain/Mostly Zero Precip.

**Wind:** Calm to Gusts at times

**Ames:** Monday July 29<sup>th</sup> construction progress was limited due to previous day's rains. Erosion control, access road and haul road clean up was the majority of the work performed on the 29th.

**Amec:** None

**Project Issues:** None

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**I) Earthworks**

**A) VLF (Phase I)**

**Topsoil Stripping:** Organic material and debris was removed from the slopes of the existing HWY 67 embankment fill during this reporting period. Material removed was hauled to the designated topsoil stockpile utilizing several 740 haul trucks. In addition to the topsoil removed from the existing Hwy, additional topsoil material was removed and stockpiled for future haul at the mid-way.

**Production drilling** was performed during this reporting period near design bench "E" within the limits of the VLF, the planned PSSA floor and at the south crib wall location. Production drilling is expected to continue.

**Six production blasts'** occurred during this reporting period within planned VLF Phase I limit's, South Crib Wall location and within the PSSA floor limits. Material generated as "cut" material generated structural fill using several Cat dozers and transported by several Cat 777 and 740 haul trucks to be used for the HWY 67 embankment fill.

**Structural Fill:** Structural fill began to be hauled to the PSSA toe berm area widening the haul road, using several Cat 777 and several 740 haul trucks. The structural fill material was placed in an approximately 18 to 24 inch loose lifts by a John Deere 1050J and D10R dozers followed by a Cat CS56B vibratory, 10-ton, smooth-drum roller that compacted the placed materials with a minimum of four passes (By method specification).



In addition to the structural fill placement for the PSSA toe berm embankment, the contractor continued cut to fill operations and compaction by method specification located at the mid-way ADR haul road location at approximate Sta. 44+00 – 47+00. A Cat D8 Dozer with GPS and a Cat C556 Smooth Drum roller was utilized. Progress is expected to continue.

See Hwy 67 below for detail of embankment fill progress.

Note: An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F

#### Clay (SLF) Processing:

**Cameron Site:** No clay mining or processing occurred during this reporting period due to a saturated site from previous rains. However on July 31<sup>st</sup> an Amec representative potholed 17 test pit's to determine possible clay limits within an area of the Whex, adjacent the Cameron site. A sample was taken from each pit and returned to our laboratory for classification and permeability testing. Results will be forwarded upon completion.

#### **Squaw Gulch Site:**

No work occurred at the VLF clay borrow site during this reporting period.

#### Underdrain System:

**Secondary Underdrain:** No work was performed on the Secondary underdrain during this reporting period.

A total of 1380 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** Temporary underdrain pipe is installed thru the embankment. No other work occurred during this reporting period.

#### **Tree /Slash Clearing, Chipping:**

Seed Masters paused operations until further notice.

#### **B) Underground Workings**

Confirmatory drilling was not performed during this reporting period..

During this reporting period exploratory excavation was performed on UG working No. U6122, No. U6255, No. 6260 and No. U6263. Site's listed require further investigation and excavation into bedrock as remediation continues to be completed.

It should be noted, working No.U6263 is planned to have a concrete plug and cemented rock fill for remediation. Its expected remediation on this working will be completed during the next reporting period.

During this reporting period remediation efforts were performed and completed on UG working No.6079, No. 6084, No. 6196, No. 6206, No. 6251, No. 6252, No. 6253, No. 6254, No. 6255, No. 6259, No. 6264, No. 6265 and No. U6267. Sites listed were excavated to practical refusal into rock varying depths depending on the working remediated. The site for each working was then backfilled in 2 foot loose lifts to approximate planned subgrade elevation using the onsite structural fill (excavated material) and "bucket tamped" with the back of the CAT 330 excavator bucket. All backfill material was free of organic material, ice and snow and are considered remediated as specified.



**C) Highway 67**

Fill was hauled to the Highway 67 embankment area using several Cat 777 haul trucks and several Cat 740 haul trucks. The structural fill material was placed in an approximately 18 to 14 inch lifts by Cat D10R, John Deere 1050 and Cat D8R Dozers. The Cat CS56B vibratory, 10-ton, smooth-drum roller completed the minimum of four passes (Method Specification Applies) over the lift surface. It should be Noted: haul trucks, loaded and unloaded, drove over the backfill surface contributing to the overall compaction of the lift. In addition a Cat 330B excavator equipped with a jackhammer (hammer hoe) broke up the oversize material encountered and a Cat D6R with gps graded and shaped the downstream slope of the toe berm.

A Cat 773 water truck and a Cat 14H grader were observed working the fill area on occasion.

A GPS dozer was observed shaping the western downstream slope of the embankment. (See "Structural Fill" above)

**II) Storm Water Management**

Best Management Practices (BMP) are being performed. On July 29<sup>th</sup> the contractor utilized most of the working shift, clearing roadways, draining areas and collection points from previous rains. Erosion control was being performed during this reporting period.

**CQA ACTIVITIES:**

**I) Field Activities:** Construction activities and observation of production drilling, Cut, HWY 67 embankment fill PSSA Toe Berm Fill placement and compaction, Underground remediation and field sampling were performed during this reporting period as required per project specifications.

**II) Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and identifications and material sampling were performed during this reporting period as required.

LVSCF sample No.'s 45 thru 56 were obtained during this reporting period. Results will be provided upon completion.

**General Project Items**

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on July 30<sup>th</sup> between CC&V, CDOT, Ames and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.

**Summary of Concerns:** None

**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.

**Miscellaneous:** None

**Deliveries:** None

**CQA Monitor**

**Submitted by:** Thorne M. Clark  Date: 08.03.13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

**Approved By:**  Date: 8-19-13





## ATTACHMENT A

### AMEC - 2013 CQA Field Staff Schedule MLE2

Name	July 28	July 29	July 30	July 31	Aug 1	Aug 2	Aug 3
Thorne Clark	-	PR	PR	PR	PR	PR	PR
Steve Rice	-	UG	UG	UG	UG	UG	-
Ben Melly	-	ST	ST	ST	ST	ST	-
Kevin Duarte	-	LG	LG	LG	LG	LG	LG
Uwe Kelley	-	ST	ST	ST	ST	ST	ST
Marcus Fernandez	-	LT	LT	LT	LT	LT	LT
Tyler Browning	-	-	-	-	-	-	-
Ryan Fesler	-	LT	LT	LT	LT	LT	LT
Robert Redd		UG	UG	UG	UG	UG	UG
Razi Molloy	-	LT	LT	LT	LT	LT	LT
Eric Lorensen	-	ST	ST	ST	ST	ST	LT
**Fred Taylor	-	-	-	-	ST	ST	ST
*Reggie Long	-	-	-	-	-	-	-
Randy Johnson	-	-	-	-	ST	-	-

\*Night shift

\*\*Yeh and Associates – Subcontractor HWY 67

### LEGEND

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
UG = Underground Working Remediation  
SE = Senior Engineer

**Photographs of daily activities:**



**Photo 1:** Site Overview Hwy 67/PSSA embankment



**Photo 2:** Hwy 67 Embankment compaction and structural fill placement





**Photo 3:** Generated Structural Fill (PSSA Floor)



**Photo 4:** Site overview VLF






- AREA OF CUT AND FILL  
CLEARING AND GRUBBING  
TOPSOIL STOCKPILE

**NOTE:**

AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.

CLIENT	CRIPPLE CREEK & VICTOR GOLD MINING COMPANY																												
PROJECT	MLE 2 SQUAW GULCH																												
TITLE	CLEARING, GRUBBING AND FILL AREAS																												
				<table><tr><td>DESIGNED BY</td><td>TAC</td><td>CHECKED BY</td><td>DRR</td><td>DATE</td></tr><tr><td>DRAWN BY</td><td>MF</td><td>APPROVED BY</td><td>TAC</td><td>8/05/13</td></tr><tr><td colspan="4">TELEPHONE</td><td><table><tr><td>MOBILE No.</td><td>1</td><td>EXT</td><td>8</td></tr></table></td></tr></table>							DESIGNED BY	TAC	CHECKED BY	DRR	DATE	DRAWN BY	MF	APPROVED BY	TAC	8/05/13	TELEPHONE				<table><tr><td>MOBILE No.</td><td>1</td><td>EXT</td><td>8</td></tr></table>	MOBILE No.	1	EXT	8
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**CRIPPLE CREEK & VICTOR GOLD MINING Co.  
Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**

<b>Owner:</b>	Cripple Creek & Victor Gold Mining Co.	<b>Project Number:</b>	74201125N0. *****	<b>Date</b>	08.10.2013
<b>Project:</b>	Squaw Gulch (VLF), Hwy 67 Realignment				
<b>Location:</b>	Cripple Creek & Victor Gold Mine, Colorado				
<b>Contractor:</b>	Ames Construction Co. Inc.				

**Reporting Period: 08.04.13 thru 08.10.13**

Days	S	M	T	W	T	F	S
Work Shifts	-	D	D	D	D	D	D
	-	w	N	N	N	w	N
D = Day Shift    N = Night Shift    w = Weather Day							

**Ambient Temperature Ranges for reporting period:**

**Low:** 38°F – 52°F

**High:** 55°F – 72°F

**Weather conditions for reporting period:**

**Cloud Cover:** Clear / partly Cloudy/Cloudy

**Precipitation:** P.M. Rain

**Wind:** Calm to Gusts at times

**Ames:** Reporting a delay start Monday the 5<sup>th</sup> and Tuesday the 6<sup>th</sup> due to site conditions caused by recent rains, Wednesday 7<sup>th</sup> and Thursday the 9<sup>th</sup> construction activities were paused or slowed due to weather conditions during the afternoon shifts. Monday the 5<sup>th</sup> no night shift occurred due to rainy weather conditions.

Erosion control, access road and haul road clean up took place throughout the reporting period due to site conditions, caused by recent rains.

Saturday the 10<sup>th</sup> it should be noted; crusher operations have paused production due to a new belt line being installed. It is anticipated production will resume during the next reporting period.

**Amec:** None

**Project Issues:** None

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**I) Earthworks**

**A) VLF (Phase I)**

**Topsoil Stripping:** Organic material and debris was removed from the southern existing HWY 67 embankment during this reporting period. Material removed was hauled to the topsoil stockpile 34 utilizing several 740 haul trucks. In addition to the topsoil removed from the existing Hwy area, additional topsoil material was removed and stockpiled for future haul at the mid-way area Approximate ADR HR STA. 44+00 – 50+00.

**Production drilling** was performed during this reporting period near design bench "E" and "DD" within the limits of the VLF and at the south crib wall location. Production drilling is expected to continue.

**Five production blasts'** occurred during this reporting period within planned VLF Phase I limit's and at the South Crib Wall location. Material generated as "cut" material generated structural fill using several Cat dozers and transported by several Cat 777 and 740 haul trucks to be used for the HWY 67 embankment fill.



**Structural Fill:** Structural fill continued to be hauled to the PSSA toe berm area widening the haul road, using several Cat 777 and several 740 haul trucks. The structural fill material was placed in an approximately 18 to 24 inch loose lifts by a John Deere 1050J and D10R dozers followed by a Cat C56B vibratory, 10-ton, smooth-drum roller that compacted the placed materials with a minimum of four passes (By method specification).

In addition to the structural fill placement for the PSSA toe berm embankment, the contractor continued cut to fill operations and compaction by method specification located at the mid-way ADR haul road location at approximate Sta. 50+00 – 53+00. A Cat D8 Dozer with GPS and a Cat C556 Smooth Drum roller was utilized. Progress is expected to continue.

See Hwy 67 below for detail of embankment fill progress.

**Note:** An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F

**Clay (SLF) Processing:**

**Cameron Site:** No clay mining or processing occurred during this reporting period due to a saturated site from previous rains.

**Squaw Gulch Site:**

No work occurred at the VLF clay borrow site during this reporting period.

**Underdrain System:**

**Secondary Underdrain:** No work was performed on the Secondary underdrain during this reporting period.

A total of 1380 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** Temporary underdrain pipe is installed thru the embankment. No other work occurred during this reporting period.

**Tree /Slash Clearing, Chipping:**

Seed Masters paused operations until further notice.

**B) Underground Workings**

Confirmatory drilling was performed on underground working No. 6132, No. 6187, No. 6239 during this reporting period. All drill hole locations were established on a 4-foot center isolating any voids found. Further remediation efforts will be ongoing until remediated. Summary of the remediation efforts will follow 100% remediation.

During this reporting period exploratory excavation was performed on UG working No. 6202 and No. 6203. Site's listed require further investigation and excavation into bedrock as remediation continues to be completed.

During this reporting period remediation efforts were performed and completed on UG working No. 6122, No. 6194, No. 6195, No. 6203 and No. U6263. Sites listed were excavated to practical refusal into rock varying depths depending on the working remediated. The site for each working was then backfilled in 2 foot loose lifts to approximate planned subgrade elevation using the onsite structural fill (excavated material) and "bucket tamped" with the back of the CAT 330 excavator bucket. All backfill material was free of organic material, ice and snow and are considered remediated as specified.



It should be noted, working No.U6263 received a concrete plug and completed with an approved cemented rock fill. In addition UG working No. 6122 was completed with three layers of Geogrid.

**C) Highway 67**

Fill continued to be hauled to the southern portion of the Highway 67 embankment using several Cat 777 haul trucks and several Cat 740 haul trucks. The Northern portion of the embankment appears to be close to fill grade.

The structural fill material was placed in an approximately 18 to 24 inch lifts by Cat D10R, John Deere 1050 and Cat D8R Dozers. The Cat CS56B vibratory, 10-ton, smooth-drum roller completed the minimum of four passes (Method Specification Applies) over each lift surface placed. It should be noted: haul trucks, loaded and unloaded, drove over the backfill surface contributing to the overall compaction of the lift. In addition a Cat 330B excavator equipped with a jackhammer (hammer hoe) broke up the oversize material encountered.

A GPS dozer was observed slope contouring the western downstream slope of the embankment and is expected to continue.

**ID) Storm Water Management**

Best Management Practices (BMP) are being performed. During the reporting period due to recent rains the contractor was observed clearing roadways, draining areas of standing water and cleaning out collection sumps.

Erosion control efforts took place during this reporting period.

**CQA ACTIVITIES:**

**I) Field Activities:** Observation of construction activities, production drilling, Cut to Fill ADR Haul Road (HR), HWY 67 embankment fill PSSA Toe Berm Fill placement and compaction, Underground remediation and field sampling were performed during this reporting period as required per project specifications.

**II) Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and identifications and material sampling were performed during this reporting period as required.

LVSCF sample No.'s 57 thru 65 were obtained during this reporting period. Results will be forwarded upon completion.  
**Total Tons: 183,541**

**General Project Items**

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on August 6<sup>th</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.

**Summary of Concerns:** None

**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.

**Miscellaneous:** None

**Deliveries:** None

**CQA Monitor**

**Submitted by:** Thorne M. Clark  **Date:** 08.10.13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

**Approved By:** 

**Date:** 8-19-13





## ATTACHMENT A

### AMEC - 2013 CQA Field Staff Schedule MLE2

Name	Aug 4	Aug 5	Aug 6	Aug 7	Aug 8	Aug 9	Aug 10
Thorne Clark	-	PR	PR	PR	PR	PR	PR
Steve Rice	-	-	UG	UG	UG	UG	UG
Ben Melly	-	ST	ST	ST	ST	ST	ST
Kevin Duarte	-	LG	LG	LG	LG	LG	LG
Uwe Kelley	-	ST	ST	ST	ST	ST	-
Marcus Fernandez	-	LT	LT	LT	LT	LT	-
Tyler Browning	-	-	-	-	-	-	-
Ryan Fesler	-	LT	LT	LT	LT	LT	-
Robert Redd		UG	UG	UG	UG	UG	UG
Razi Molloy	-	LT	LT	LT	LT	LT	-
Eric Lorensen	-	ST	ST	ST	ST	ST	LT
**Fred Taylor	-	ST	ST	ST	ST	ST	ST
*Reggie Long	-	-	-	-	-	-	-

\*Night shift

\*\*Yeh and Associates – Subcontractor HWY 67

### LEGEND

PS = Project Sponsor  
 PCE = Project Certifying Engineer  
 PM = Project Manager  
 PR = Project Resident  
 LS = Lead Soils Engineer  
 LG = Lead Geosynthetics Engineer  
 ST = Soil Technician  
 LT = Laboratory Technician  
 GT = Geosynthetics Technician  
 FLM= Field/Laboratory Manager  
 UG = Underground Working Remediation  
 SE = Senior Engineer

**Photographs of daily activities:**



**Photo 1:** Site Overview Hwy 67/PSSA embankment



**Photo 2:** South Crib Wall – Production Drilling



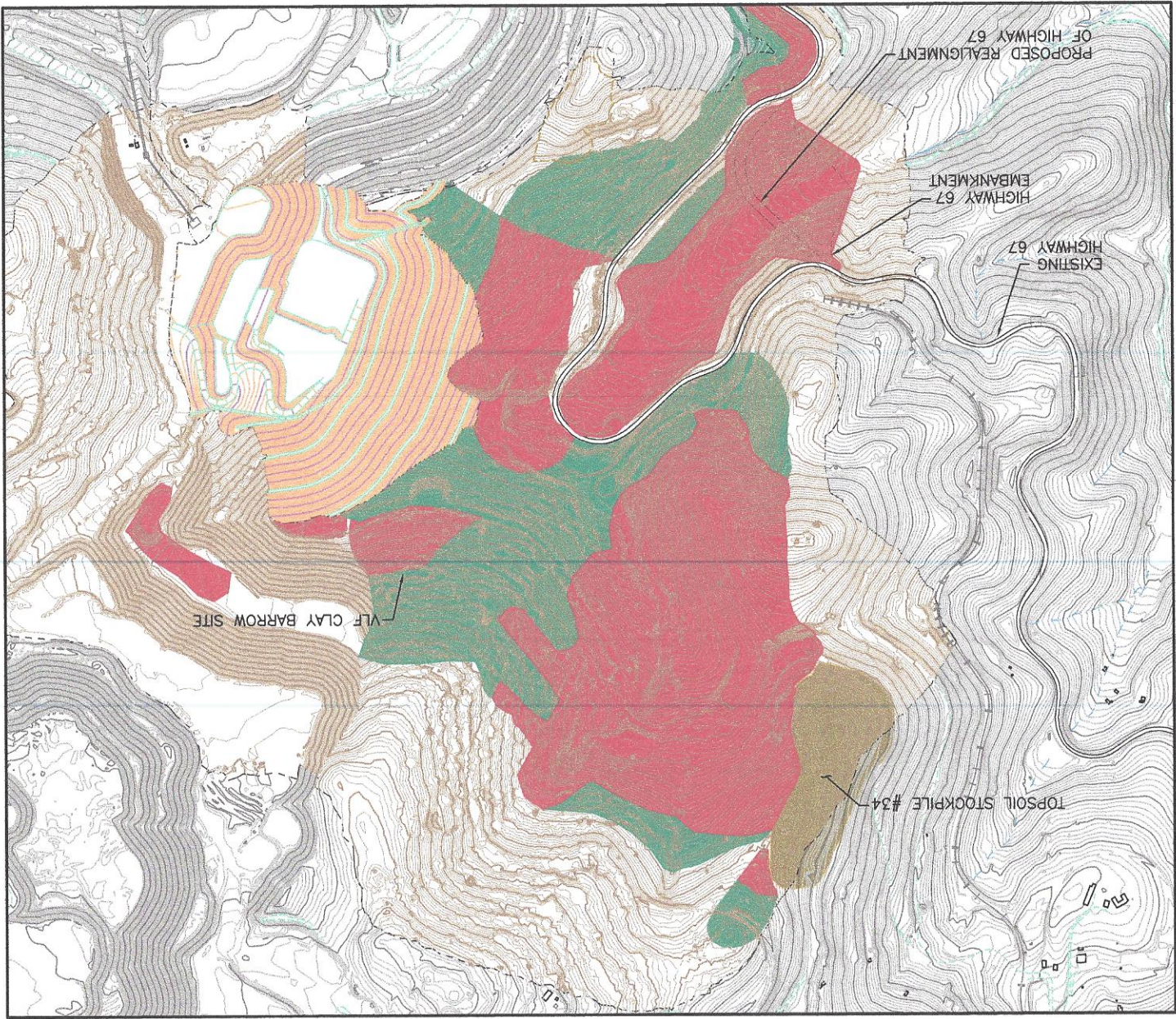


**Photo 3:** Hwy 67 Embankment Structural Fill Placement



**Photo 4:** ADR HR - Midway Cut to Fill





# **LEGEND:**

- AREA OF CUT AND FILL
- CLEARING AND GRUBBING
- TOPSOIL STOCKPILE

## **NOTE:**

AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.

CLIENT		CRIPPLE CREEK & VICTOR GOLD MINING COMPANY	
PROJECT		MLE 2 SQUAW GULCH	
TITLE		CLEARING, GRUBBING AND FILL AREAS	
DESIGNED BY	TJAC	CHECKED BY	NRN
DRAWN BY	MT	APPROVED BY	TJAC
DATE	8/10/13	FIGURE NO.	1
REV	A	amec	





**CRIPPLE CREEK & VICTOR GOLD MINING Co.**  
**Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**

<b>Owner:</b>	Cripple Creek & Victor Gold Mining Co.
<b>Project:</b>	Squaw Gulch (VLF), Hwy 67 Realignment
<b>Location:</b>	Cripple Creek & Victor Gold Mine, Colorado
<b>Contractor:</b>	Ames Construction Co. Inc.

**Reporting Period: 08.11.13 thru 08.17.13**

D = Day Shift    N = Night Shift    w = Weather Day						
Days	Work Shifts					
	S	M	T	W	T	F
S	-	D	D	D	D	D
N	-	N	N	N	N	N

<b>Ambient Temperature Ranges for reporting period:</b>	<b>Weather conditions for reporting period:</b>
<b>Low:</b> 41°F – 45°F <b>High:</b> 71°F – 79°F	<b>Cloud Cover:</b> Clear / partly Cloudy/Cloudy <b>Precipitation:</b> P.M. Rain <b>Wind:</b> Calm to Gusts at times

**Ames:** Weather conditions paused haul operations at 4pm on the 12<sup>th</sup> and a late start for the night shift. At 3pm on the 13<sup>th</sup> haul operations were paused due to rain and slick roads. Erosion control efforts were performed following the precipitation.

Crusher operations resumed processing on Wednesday the 14<sup>th</sup>. Operations were paused due to a new belt line being installed.

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**I) Earthworks**

**A) VLF (Phase I)**

**Topsoil / Overburden Stripping:** Overburden materials were observed being stockpiled at the toe of the Ball Mill fill, to mine clay at the VLF borrow site.

**Production drilling** was performed during this reporting period near design benches "C", "E" and "D" within the limits of the VLF and at the crib wall location. Production drilling is expected to continue.

**Five production blasts'** occurred during this reporting period within planned VLF Phase I limits and at the South Crib Wall location.

**Structural Fill:** Structural fill continued to be hauled to the PSSA toe berm area widening the haul road, using several Cat 777 and several 740 haul trucks. The structural fill material was placed in an approximately 18 to 24 inch loose lifts by a John Deere 1050J and D10R dozers followed by a Cat CS56B vibratory, 10-ton, smooth-drum roller that compacted the placed materials with a minimum of four passes (By method specification).



In addition to the structural fill placement for the PSSA toe berm embankment, the contractor continued fill operations and compaction by method specification for ADR haul road, location at approximate Sta. 78+00 – 83+00 and near midway at approximate Sta. 48+00 – 50+00. A Cat D8 Dozer with GPS and a Cat C556 Smooth Drum roller was utilized. Progress is expected to continue.

See Hwy 67 below for detail of embankment fill progress.

**Note:** An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F

#### Clay (SLF) Processing:

**Cameron Site:** No clay mining or processing occurred during this reporting period due to a saturated site from previous rains.

#### **Squaw Gulch Site:**

Clay stripping and stockpiling occurred during this reporting period.

#### Underdrain System:

**Secondary Underdrain:** No work was performed on the Secondary underdrain during this reporting period.

A total of 1380 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** No work was performed on the temporary underdrain during this reporting period.

#### **Tree/Slash Clearing, Chipping:**

Seed Masters paused operations until further notice.

#### **B) Underground Workings**

Exploratory excavation was performed on underground working No. U6269 and No. 6011. These sites require further excavation and exploratory efforts.

Confirmatory drilling was performed on underground working No. 6051, No. 6147, No. 6187, No. 6239 during this reporting period. All drill hole locations were established on a 4-foot center isolating any voids found. Further remediation efforts will be ongoing until remediated. Summary of the remediation efforts will follow 100% remediation.

During this reporting period exploratory excavation was performed on UG working No. 6269 and No. 6011. Sites listed require further investigation and excavation into bedrock as remediation continues to be completed.

Underground working No. 6051, Concrete Plug was placed and will continue with remediation efforts until remediation is complete. A cemented rockfill is scheduled to be placed to complete this working.

Underground Working No. 6239, site is prepared for geogrid to complete remediation.

During this reporting period remediation efforts were performed and completed on UG working No. 6137, No. 6139, No. 6140, No. 6197, No. 6198 and No. 6199. Sites listed were excavated to practical refusal into rock varying depths depending on the working remediated. The site for each working was then backfilled in 2 foot loose lifts to approximate subgrade elevation using the onsite structural fill (excavated material) and "bucket tamped"





with the back of the CAT 330 excavator bucket. All backfill material was free of organic material, ice and snow and are considered remediated as specified.

## C) Highway 67

Fill continued to be hauled to the southern portion of the Highway 67 embankment using several Cat 777 haul trucks and several Cat 740 haul trucks.

The structural fill material was placed in an approximately 18 to 36 inch lifts by Cat D10R, John Deere 1050 and Cat D8R Dozers. The Cat CS56B vibrator, 10-ton, smooth-drum roller completed the minimum of four passes (Method Specification Applies) over each lift surface placed. It should be noted: haul trucks, loaded and unloaded, drove over the backfill surface contributing to the overall compaction of the lift. In addition a Cat 330B excavator equipped with a jackhammer (hammer hoe) broke up the oversize material encountered.

A GPS dozer was observed slope contouring the western downstream slope of the embankment and is expected to continue.

It should be noted; during this reporting period, cracks along the edge of the existing why 67 embankment were observed appearing. It was determined that the slope would require buttressing. The contractor placed structural fill materials along the existing slope of hwy 67 the morning of August 14<sup>th</sup>. The area continues to be monitored and no additional cracking has occurred.

A proposed R40 material to be used was obtained and returned to Amec's laboratory for testing. Results indicated that the material sampled meet the R40 value.

### South MSE Wall:

The contractor continued preparing the subgrade using one hammer hoe along the MSE wall foundation alignment. Backfill materials and face rock were hauled to site early in the week. Leveling pad was prepared and accepted for placement of welded wire baskets. Subgrade acceptance was performed early in the reporting period, allowing the contractor to proceed with installation of the MSE wall components.

Face rock material was tested in the field for resistivity and it was determined that material being used meets the requirements per field testing. In addition reinforced fill materials were sampled in our laboratory for gradation analysis and meet the specification requirements.

MSE wall components continue to be installed per plans and specifications.

## II) Storm Water Management

Best Management Practices (BMP) are being performed. Erosion control efforts took place during this reporting period.

## CQA ACTIVITIES:

- I) **Field Activities:** Observation of construction activities: production drilling, Cut to Fill ADR Haul Road (HR), HWY 67 embankment fill PSSA Toe Berm Fill placement and compaction, MSE wall construction, Underground remediation and field sampling were performed during this reporting period as required per project specifications.

- II) **Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and material sampling were performed during this reporting period as required.



**LVSCF:** No samples were obtained during this reporting period.  
**SLF:** Sample No. 45 was obtained during this reporting period.  
**Class 1:** Sample No. 1 was obtained and returned to our laboratory for gradation analysis.

**General Project Items**  
**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on August 14<sup>th</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project issues, concerns and planning.  
**Summary of Concerns:** None  
**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.  
**Miscellaneous:** None  
**Deliveries:** None

**CQA Monitor**  
**Submitted by:** Thorne M. Clark  
**Date:** 08.17.13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

**Approved By:**   
**Date:** 8-27-13





ATTACHMENT A

AMEC - 2013 COA Field Staff Schedule MLE2

Name	Aug 11	Aug 12	Aug 13	Aug 14	Aug 15	Aug 16	Aug 17
Thorne Clark	-	PR	PR	PR	PR	PR	PR
Steve Rice	-	UG	UG	UG	UG	UG	UG
Ben Melly	-	ST	ST	ST	ST	ST	ST
Kevin Duarte	-	LG	LG	LG	-	-	-
Uwe Kelley	-	ST	ST	ST	ST	ST	-
Marcus Fernandez	-	LT	LT	LT	LT	LT	LT
Tyler Browning	-	ST	ST	ST	ST	ST	-
Ryan Fesler	-	LT	LT	LT	LT	-	-
Robert Redd		UG	UG	UG	UG	UG	-
Razi Molloy	-	LT	LT	LT	LT	LT	-
Eric Lorensen	-	-	ST	ST	ST	ST	LT
**Fred Taylor	-	ST	ST	ST	ST	ST	ST
*Reggie Long	-	ST	ST	ST	ST	ST	ST

\*Night shift

\*\*Yeh and Associates – Subcontractor HWY 67

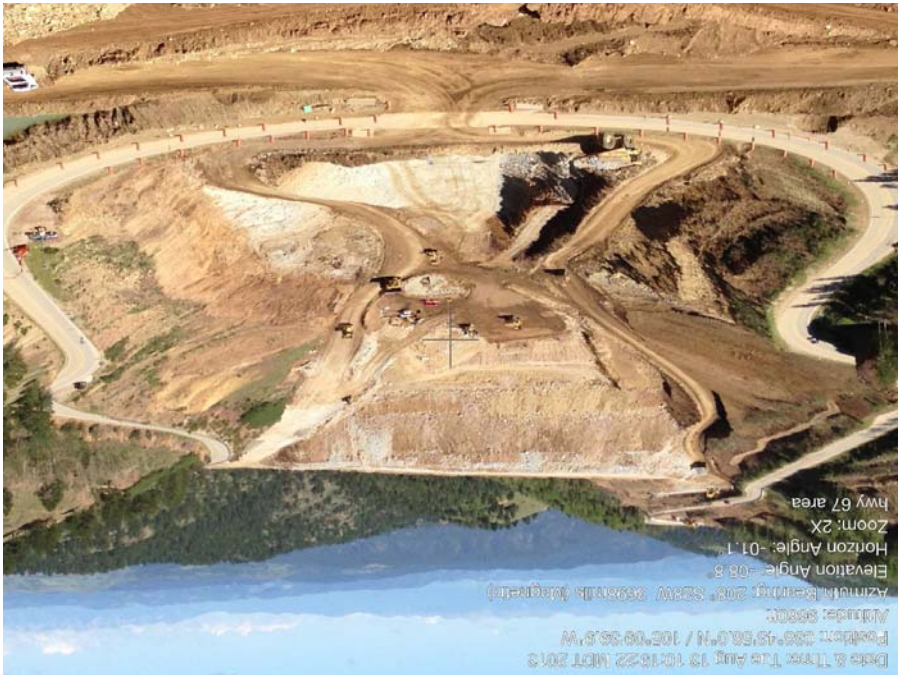
LEGEND

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
UG = Underground Working Remediation  
SE = Senior Engineer

**Photo 2:** South Crib Wall – Foundation Prep.



**Photo 1:** Site Overview Hwy 67/PSSA embankment



**Photographs of daily activities:**





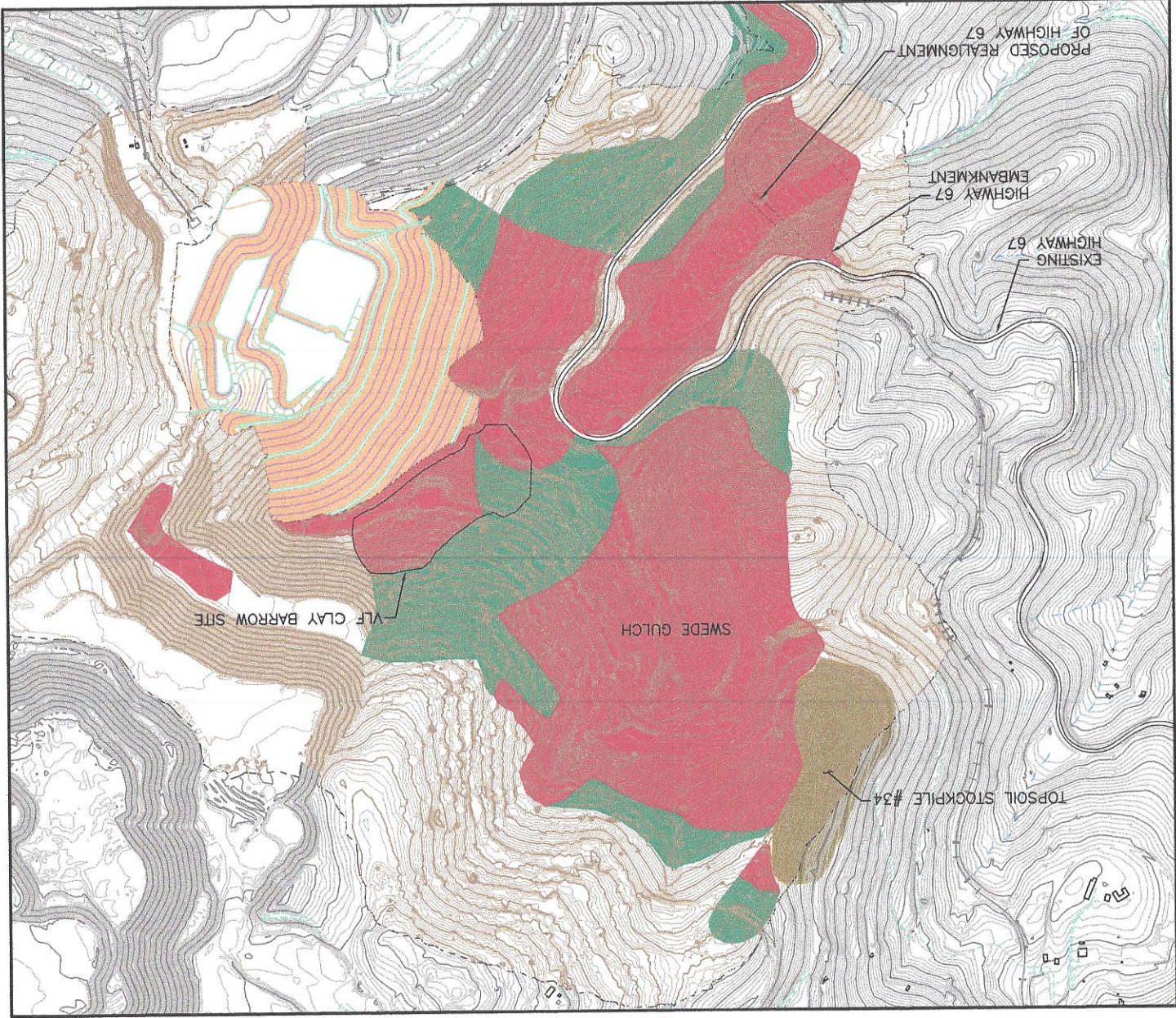
**Photo 4:** ADR Haul Road construction Approx Sta. 80+00



**Photo 3:** VLF Clay stripping







# **LEGEND:**

- AREA OF CUT AND FILL
- CLEARING AND GRUBBING
- TOPSOIL STOCKPILE

## **NOTE:**

AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.

CLIENT		CRIPPLE CREEK & VICTOR	
PROJECT		MILE 2 SQUAW GULCH	
TITLE		CLEARING, GRUBBING AND FILL AREAS	
DESIGNED BY	TAC	CHECKED BY	RRB
DATE	8/17/15	DATE	
APPROVED BY	TAC	APPROVED BY	TAC
DATE	8/17/15	DATE	
REV	1	REV	A

**amc**



See Hwy 67 embankment fill below for additional detail on materials placed.

An amec field representative observed a Cat 330BL working the slope at diversion pond 2, North of area #34 stockpile during this reporting period.

**Structural Fill:** The contractor continued fill operations and compaction by method specification for the ADR haul road and the PSSA toe berm. Structural fill materials were hauled with several 777 haul trucks to approximate ADR haul road Sta. 38+00 – 49+00 and Sta. 72+00 – 84+00. In addition 777 haul trucks hauled structural fill materials to the PSSA toe Berm. A Cat D8T and a Cat D10T were utilized to spread the materials placed. Compaction was achieved by method specification utilizing a Cat 563 and a Cat CS56B Smooth Drum roller. Progress is expected to continue.

Four production blasts' occurred during this reporting period within planned VLF Phase I limits.

**Production drilling** was performed during this reporting period near design bench "C" from approximate Stations C3+00 thru C7+00 and C14+00 – C16+00, and bench A1 within limits of the VLF. Production drilling is expected to continue.

**Topsoil / Overburden Stripping:** During this reporting period, overburden materials were observed being pushed into the toe of the Ball Mill fill to mine clay at the VLF borrow site. In addition, intermittent soil stripping occurred in the Raven Hill area. Stripping is expected to continue as needed.

(A) VLF (Phase I)

**I) Earthworks**

## CONSTRUCTION ACTIVITIES and PROGRESS:

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

<p><b>Ambient Temperature Ranges for reporting period:</b></p> <p>Low: 47°F - 55°F          High: 72°F - 79°F</p>	<p><b>Weather conditions for reporting period:</b></p> <p>Cloud Cover: Clear / partly Cloudy/Cloudy          Precipitation: P.M. Rain          Wind: Calm to Gusts at times</p>
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D = Day Shift    N = Night Shift    w = Weather Day							
Days	-	N	D	T	W	T	F
	-	D	D	D	D	D	D
Work Shifts	-	N	N	N	N	N	N

Reporting Period: 08.18.13 thru 08.24.13

**Contractor: Ames Construction Co. Inc.**

**Location:** Cripple Creek & Victor Gold Mine, Colorado

**Project:** Squaw Gulch (VLF), Hwy 67 Realignment  
74201125N0.\*\*\*\*\*  
08.24.2013

**Project Number:** \_\_\_\_\_  
**Date** \_\_\_\_\_

08.24.2013

**CRIPPLE CREEK & VICTOR GOLD MINING Co.**  
**Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**





Note: An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F.

#### Clay (SLF) Processing:

Cameron Site: Clay processing resumed during this reporting period.

Squaw Gulch Site: Clay stripping and stockpiling occurred during this reporting period.

#### Underdrain System:

**Secondary Underdrain:** No work was performed on the Secondary underdrain during this reporting period.

A total of 1380 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** No work was performed on the temporary underdrain during this reporting period.

#### **Tree/Slash Clearing, Chipping:**

Seed Masters paused operations until further notice.

#### **B) Underground Workings**

Exploratory excavation was performed on underground working No. 6132 and No. U6273. These sites require further excavation and exploratory efforts.

Confirmatory drilling was performed on underground working No. 6132, No. 6187 during this reporting period. All drill hole locations were established on a 4-foot center isolating any voids found. Further remediation efforts will be ongoing until remediated. Summary of the remediation efforts will follow 100% remediation.

Underground working No. 6051, Concrete Plug was placed and will continue with remediation efforts until remediation is complete. A cemented rockfill is scheduled to be placed to complete this working.

Underground Working No. 6122 requires geogrid and will be prepared for this application as remediation efforts continue.

Underground Working No. 6239, is considered remediated, 3 layers of Geogrid were placed per directive provided per project specifications. No other sites were remediated during this reporting period.

#### **C) Highway 67**

Fill continued to be hauled to the southern portion of the Highway 67 embankment using several Cat 777 haul trucks and several Cat 740 haul trucks.

The structural fill material was placed in an approximately 18 to 36 inch lifts by Cat D10R, John Deere 1050 and Cat D8R Dozers. The Cat CS56B vibrator, 10-ton, smooth-drum roller completed the minimum of four passes (Method Specification Applies) over each lift surface placed. It should be noted: haul trucks, loaded and unloaded, drove over the backfill surface contributing to the overall compaction of the lift. In addition a Cat 330B excavator equipped with a jackhammer (hammer hoe) broke up the oversize material encountered. The final structural lift surface was placed on Tuesday 8.20.13 and final grading of the structural fill occurred using a GPS equipped D6R.



LVSCF: Sample No's 67 thru 75 were obtained during this reporting period.  
SLF: Sample No. 46 was obtained during this reporting period.

during this reporting period as required.

**II) Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and field material sampling were performed

**I) Field Activities:** Observation of construction activities during this reporting period included: PSSA Toe Berm Fill placement and compaction, MSE wall construction, Underground remediation and clay processing.

## CQA ACTIVITIES:

Best Management Practices (BMP) are being performed. Erosion control efforts took place during this reporting period.

## II) Storm Water Management

MSE wall components continue to be installed per plans and specifications.

**Note:** Tension of the Geogrid is being monitored during placement. Correlations of Nuclear Density Guages were performed between CDT and Amec. A total of three test locations were randomly selected with an average of four tests performed at each location. The difference between the average test results between CDT and Amec were less than 2%.

Welded wire baskets were placed along the exterior of the wall's alignment and wire-tied together. Tensar UX1500 geogrid were joined to the 18 inch wire welded basket leg lengths to create an 8.5 foot reinforcement length for the wall. Locking tail struts were placed every 16 inches on center mechanically securing the geogrid to the baskets and reinforcing the front face of the basket, stabilizing backfill and face rock were then placed. The stabilizing backfill was placed in 9 inch lifts and packed with plate tampers within each other using non-woven geotextile. The stabilizing backfill was placed in 9 inch lifts and packed with plate tampers within 3 feet of the wall face and with the Cat CS433 10-ton, vibratory roller on the areas greater than 3 feet in distance from the wall face. The lifts were tested for moisture and compaction prior to starting the next mat. Compaction tests performed met or exceeded 95% compaction. Reinforcing Fill material was moisture conditioned prior to placement.

Construction of the South MSE wall continued. Subgrade was accepted and prepared by placing thin lift of 1.5 inch minus material (low volume fill) over the granitic bedrock surface. The low volume fill was then compacted using a Cat CS433 10-ton, vibratory roller passing over the surface a minimum of 4 times.

### South MSE Wall:

Two 90 foot long 18 inch galvanized corrugated steel underdrain pumpback pipes were installed during this reporting period at the north end of the High 67 embankment. Each 90 foot length of pipe was composed of three 30 foot sections coupled together. The piping was placed on a 3 inch pipe bed of class 1 material. The pipes were placed 3 feet apart on center line and back filled in 9 inch lifts. The fill was then compacted using a jumping-jack up to 1 foot above the pipe and then using a CS56B vibrator, 10-ton, smooth-drum roller at about 2 feet above the pipe. Nuclear Density testing was performed on the compacted material, which resulted in compaction meeting the required compaction.

(7) 8 foot sections of 24 inch RCP were installed. The pipe was placed on a minimum of 3 inches of bedding and backfilled with select structural backfill (Class 1). A couple of informational density tests were taken to establish an effective method of compaction.

R40 sub-base material placement began. The R 40 material was hauled utilizing five (5) Cat 740 haul trucks and placed in approximately 8 inch lifts by a Cat D6N dozer with GPS and A John Deere 1050J dozer. A Cat 773 water truck applied water to the material prior to compaction performed by a Cat CS56B vibrator, 10-ton, smooth-drum roller. The roller completed the minimum of four passes over the lift surface (per method specification). The haul trucks, loaded and unloaded, drove over the backfill surface contributing to the overall compaction of the lift.






**Class 1:** Sample No. 2 was obtained during this reporting period  
**R40:** Sample No. 1 was obtained during this reporting period  
**Face Rock:** Sample No. 5 was obtained during this reporting period

**General Project Items**

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on August 21<sup>st</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.

**Summary of Concerns:** None  
**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.

**Miscellaneous:** None  
**Deliveries:** None

**CQA Monitor**  
  
Submitted by: Thorne M. Clark

Date: 08.24.13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

Approved By:   
Date: 9-3-13





ATTACHMENT A

AMEC - 2013 COA Field Staff Schedule MLE2

Name	Aug 18	Aug 19	Aug 20	Aug 21	Aug 22	Aug 23	Aug 24
Thorne Clark	-	PR	PR	PR	-	-	-
Steve Rice	-	UG	UG	UG	UG	UG	-
Ben Melly	-	ST	ST	ST	ST	ST	ST
Kevin Duarte	-	-	-	LG	LG	LG	LG
Uwe Kelley	-	ST	ST	ST	ST	ST	LG
Marcus Fernandez	-	LT	LT	LT	LT	LT	LT
Tyler Browning	-	ST	ST	ST	-	-	-
Ryan Fesler	-	LT	LT	LT	LT	LT	LT
Robert Redd	-	-	UG	UG	UG	UG	UG
Razi Molloy	-	LT	LT	LT	LT	LT	LT
Eric Lorensen	-	-	ST	ST	ST	ST	LT
**Fred Taylor	-	ST	ST	ST	ST	ST	ST
*Reggie Long	-	ST	ST	ST	ST	ST	ST

\*Night shift

\*\*Yeh and Associates – Subcontractor HWY 67

LEGEND

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
UG = Underground Working Remediation  
SE = Senior Engineer

Photographs of daily activities:





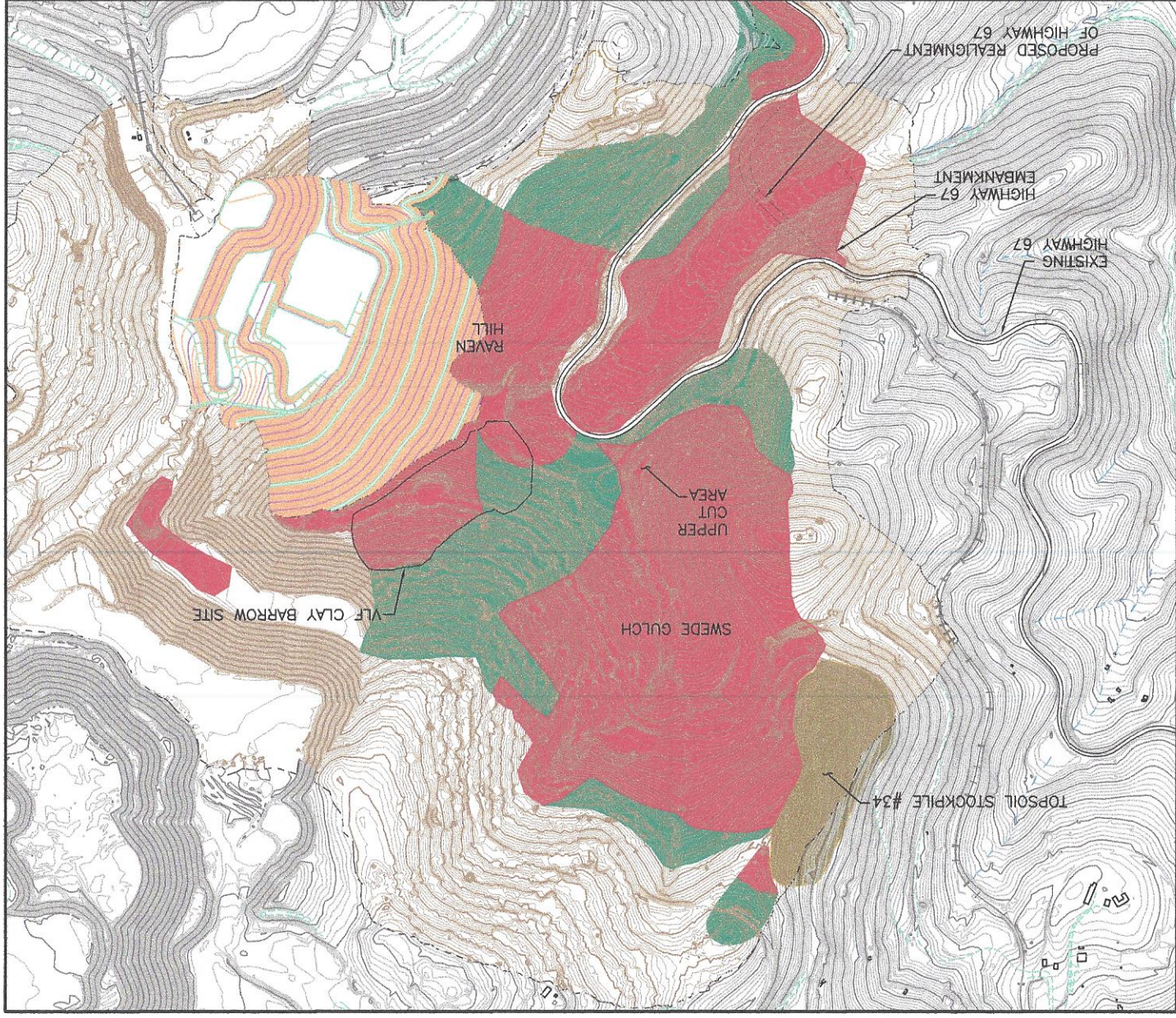


**Photo 4:** Geogrid placement, Underground Working UG #6239



**Photo 3:** RCP and fill placement, Highway 67 Realignment Embankment





# **LEGEND:**

- AREA OF CUT AND FILL
- CLEARING AND GRUBBING
- TOPSOIL STOCKPILE

## **NOTE:**

AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.

CLIENT		PROJECT		TITLE	
CRIPPLE CREEK & VICTOR GOLD MINING COMPANY		MILE 2 SQUAW GULCH		CLEARING, GRUBBING AND FILL AREAS	
DESIGNED BY	THAC	CHECKED BY	MRB	DATE	
DRAWN BY	MR	APPROVED BY	THAC	DATE	
amc		PROJECT NO.		REV	
1		A			





**CRIPPLE CREEK & VICTOR GOLD MINING Co.**  
**Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**

<b>Owner:</b>	Cripple Creek & Victor Gold Mining Co.	<b>Project Number:</b>	74201125N0.****.****	<b>Date</b>	08.31.2013
<b>Project:</b>	Squaw Gulch (VLF), Hwy 67 Realignment	<b>Location:</b>	Cripple Creek & Victor Gold Mine, Colorado	<b>Contractor:</b>	Ames Construction Co. Inc.

Reporting Period: 08.25.13 thru 08.31.13									
Days		Work Shifts		D = Day Shift    N = Night Shift    W = Weather Day					
S	M	T	W	T	F	S	-	-	-
D	D	D	D	D	D	-	N	N	N
-	-	-	-	-	-	-	-	-	-

<b>Ambient Temperature Ranges for reporting period:</b>	<b>Weather conditions for reporting period:</b>
<b>Low:</b> 48°F – 50°F <b>High:</b> 72°F – 79°F	<b>Cloud Cover:</b> Clear / partly Cloudy / Cloudy <b>Precipitation:</b> few isolated showers P.M. <b>Wind:</b> Calm to Gusts at times

**Ames:** Due to Holiday observance, construction activities were paused following an 8 hr shift on 8.30.13, and no work was performed on 8.31.13. Construction expected to resume on Tuesday 9.3.13.

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**I) Earthworks**

**A) VLF (Phase I)**

**Topsoil / Overburden Stripping:** During this reporting period, overburden materials were observed being stripped and placed for later removal near the midway area. In addition, topsoil was hauled to the area #34 stockpile that was located near midway at Approximate Sta. H4+00.

**Production drilling** was performed during this reporting period near design bench "C" from approximate Stations C4+00 thru C7+00 right of centerline and at the raven hill area at Approximate Stations A21+00 to A22+00 In addition drilling around the Phase II detention Pond occurred within limits of the VLF. Production drilling is expected to continue.

**Five production blasts'** occurred during this reporting period within planned VLF limits.

**Structural Fill:** The contractor continued fill operations and compaction by method specification for the ADR haul road and the PSSA toe berm.

Structural fill materials were hauled from the mine delivered surge pile with several 777 and 740 haul trucks to approximate ADR haul road Sta. 69+00 – 80+00. In addition structural fill was placed and compacted at approximate Sta. 49+00 – 51+00. A Cat D8T was used to spread the loose lifts and compaction was by utilizing a Cat 563 smooth drum roller.

777 and 740 haul trucks hauled structural fill materials to the PSSA toe Berm. A Cat D10T was utilized to spread the materials placed. Compaction was achieved by utilizing a Cat CS56B Smooth Drum roller. It should be noted, fill



placed for the PSSA Toe berm, was keyed into the existing HWY embankment as fill lifts were brought up. Progress is expected to continue.

See Hwy 67 embankment fill below for additional detail on materials placed.

**Note:** An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F.

#### Clay (SLF) Processing:

**Cameron Site:** Clay processing resumed during this reporting period. Approximately, 175,540 tons of clay has been processed to date.

**Squaw Gulch Site:** Clay stripping and stockpiling occurred during this reporting period.

#### Underdrain System:

**Secondary Underdrain:** No work was performed on the Secondary underdrain during this reporting period.

A total of 1380 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** No work was performed on the temporary underdrain during this reporting period.

#### Tree/Slash Clearing, Chipping:

Seed Masters paused operations until further notice.

### **B) Underground Workings**

Exploratory excavation was performed on underground working No. U6273, No. U6274, , and No. 6132. These sites require further excavation and exploratory efforts.

Confirmatory drilling was not performed during this reporting period.

Underground Working No. 6147 requires geogrid and will be prepared for this application as remediation efforts continue.

Underground Working No. 6187 requires geogrid and will be prepared for this application as remediation efforts continue.

Underground Working No. 6239 required geogrid. Remediation efforts completed.

No other sites were remediated during this reporting period.

### **C) Highway 67**

During this reporting period, R-value material equal to or above 40 (R 40 material) was placed and compacted at the Highway 67 realignment embankment.

A Cat 160M Grader with GPS continued to rip and work the R 40 material that has already been placed due to areas of high moisture. Dyer R-40 material was mixed in during the process and areas in question were repaired.

The top grade of the sub-base was established during this reporting period and a Cat CS56B vibratory, 10-ton, smooth-drum roller completed the minimum of four passes over the lift surface (per method specification). Ames conducted a quality control





proof roll and identified a number of locations that required additional work. The areas in question were reworked by ripping the surface and allowing the material to dry before recompacting the material.

A proof roll was performed at approximately 12:00 (noon) on Wednesday 8.28.13 with an Ames' tandem water truck. The proof roll was observed by Thorne Clark (Amec), Lesley Mace (CDOT) and Fred Taylor (Yeh and Associates). Four to five areas were identified and marked with paint that required additional work. Ames repaired the areas immediately by ripping the surface with a Cat 160M, GPS enabled grader, allowing the material dry, and then replacing it in lifts less than eight inches. Each lift was then compacted with a Cat CS56B vibratory, 10-ton, smooth-drum roller with the minimum of four passes (per method specification).

Ames saw cut the asphalt on existing US 67 at the tie in locations with the realigned US 67. Traffic control was set for one lane traffic while the saw cutting was being performed. Guardrails were removed and replaced with berm material and Jersey-barriers on the north side of the fill area in preparation to tie the existing highway into the realignment embankment.

**It should be noted:** during the reporting period the proposed Class 6 ABC material sourced at the Mule Creek Pit was rejected due to material being out specification. On Friday 8.30.13, another source provider was determined and a Class 6 Aggregate Base Coarse (ABC) sample was obtained from the Schmidt Pit in Fountain, Colorado by Yeh and Associates, Amec, and CDOT for laboratory analysis. Results are expected during the next reporting period.

#### **South MSE Wall:**

Ames continued mat construction and underdrain placement during this reporting period.

Mats were constructed by placing welded wire baskets along the exterior of the wall's alignment. The baskets were wire-tied together with approximately 2.5 inches of overlap. Approximately 8 foot lengths of Tensar UX1500 geogrid were joined to the 18 inch wire welded basket leg lengths to create a 9.5 foot reinforcement length for the wall. Tensar UX1500 was pulled taught against the wire baskets and secured by hand while placing reinforcing fill material. Tensar LH800 geogrid was installed on every other mat for the attachment of the timber facing. Locking tail struts were placed every 16 inches on center mechanically securing the geogrid to the baskets and reinforcing the front face of the basket. A tail strut was also added at the 2½ inch horizontal wire overlap of the basket. Face rock was placed in the wire baskets after lining the interior front face of the basket with BX1120 geogrid. Reinforcing fill material and face rock were separated from each other using non-woven geotextile material. The reinforcing fill material was placed in 9 inch lifts and packed with plate tampers within 3 feet of the wall face and with the CS-433 vibratory roller on the areas greater than 3 feet in distance from the wall face.

Each mat was tested for compaction and moisture content at the completion of mat prior to placement of next mat. Compaction tests performed met or exceeded 95% compaction. Reinforcing fill material was moisture conditioned prior to placement.

Ames continued placement of the underdrain at the back of the MSE wall along the face of existing rock. Non-woven geotextile was placed along a trench at the back of the wall where the reinforcing fill meets the native granite wall. Four inch diameter, perforated, HDPE piping was laid out in the trench on top of the geotextile. Drain rock was placed over the pipe and wrapped with geotextile with a minimum of 18 inch overlap prior to placement of reinforcing fill. Reinforcing fill was placed in 9 inch lifts and compacted using a Cat CS433E smooth drum vibratory roller.

MSE wall components continue to be installed per plans and specifications.

#### **II) Storm Water Management**

Best Management Practices (BMP) are being performed. Erosion control efforts took place during this reporting period.

#### **CQA ACTIVITIES:**

**I) Field Activities:** Observation of construction activities during this reporting period included: topsoil/overburden stripping, production drilling and blasting, Cut to Fill ADR Haul Road (HR), HWY 67 construction, PSSA Toe Berm Fill placement and compaction, MSE wall construction, Underground remediation and clay processing.



II) Laboratory Activities: Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and field material sampling were performed during this reporting period.

LVSF: Sample No's 76 thru 80 were obtained during this reporting period  
SLF: Sample No. 47 and No. 48 were obtained during this reporting period

**General Project Items**

Meetings and Discussions: Weekly Project Status meeting was held at 10:00am on August 28<sup>th</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project issues, concerns and planning.

Summary of Concerns: None

CC&V: Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.

Miscellaneous: None

Deliveries: None

**CQA Monitor**

Submitted by: Thorne M. Clark

Thorne M Clark

Project Resident Manager

Ph: 970.846.9337

Approved By:

Date: 9-23-13

Date: 08.31.13





ATTACHMENT A

AMEC - 2013 COA Field Staff Schedule MLE2

Name	Aug 25	Aug 26	Aug 27	Aug 28	Aug 29	Aug 30	Aug 31
Thorne Clark	-	PR	PR	PR	PR	-	-
Steve Rice	-	UG	UG	UG	UG	UG	-
Ben Melly	-	ST	ST	ST	ST	ST	-
Kevin Duarte	-	LG	LG	-	LG	LG	-
Uwe Kelley	-	ST	ST	ST	ST	ST	-
Marcus Fernandez	-	LT	LT	LT	LT	-	-
Tyler Browning	-	ST	ST	ST	ST	-	-
Ryan Fesler	-	LT	LT	LT	LT	-	-
Robert Redd		UG	UG	UG	UG	UG	-
Razi Molloy	-	LT	LT	LT	LT	LT	-
Eric Lorensen	-	ST	ST	ST	ST	ST	-
**Fred Taylor	-	ST	ST	ST	ST	ST	-
*Reggie Long	-	ST	ST	ST	ST	ST	-

\*Night shift

\*\*Yeh and Associates – Subcontractor HWY 67

LEGEND

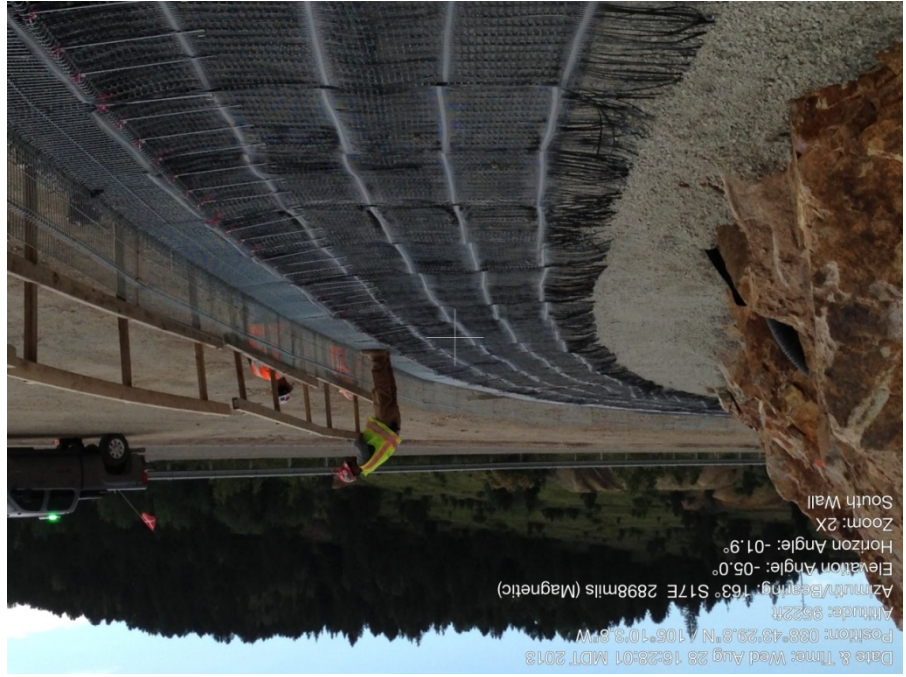
PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
UG = Underground Working Remediation  
SE = Senior Engineer



**Photographs of daily activities:**



**Photo 1:** Structural fill placement - PSSA Toe Berm

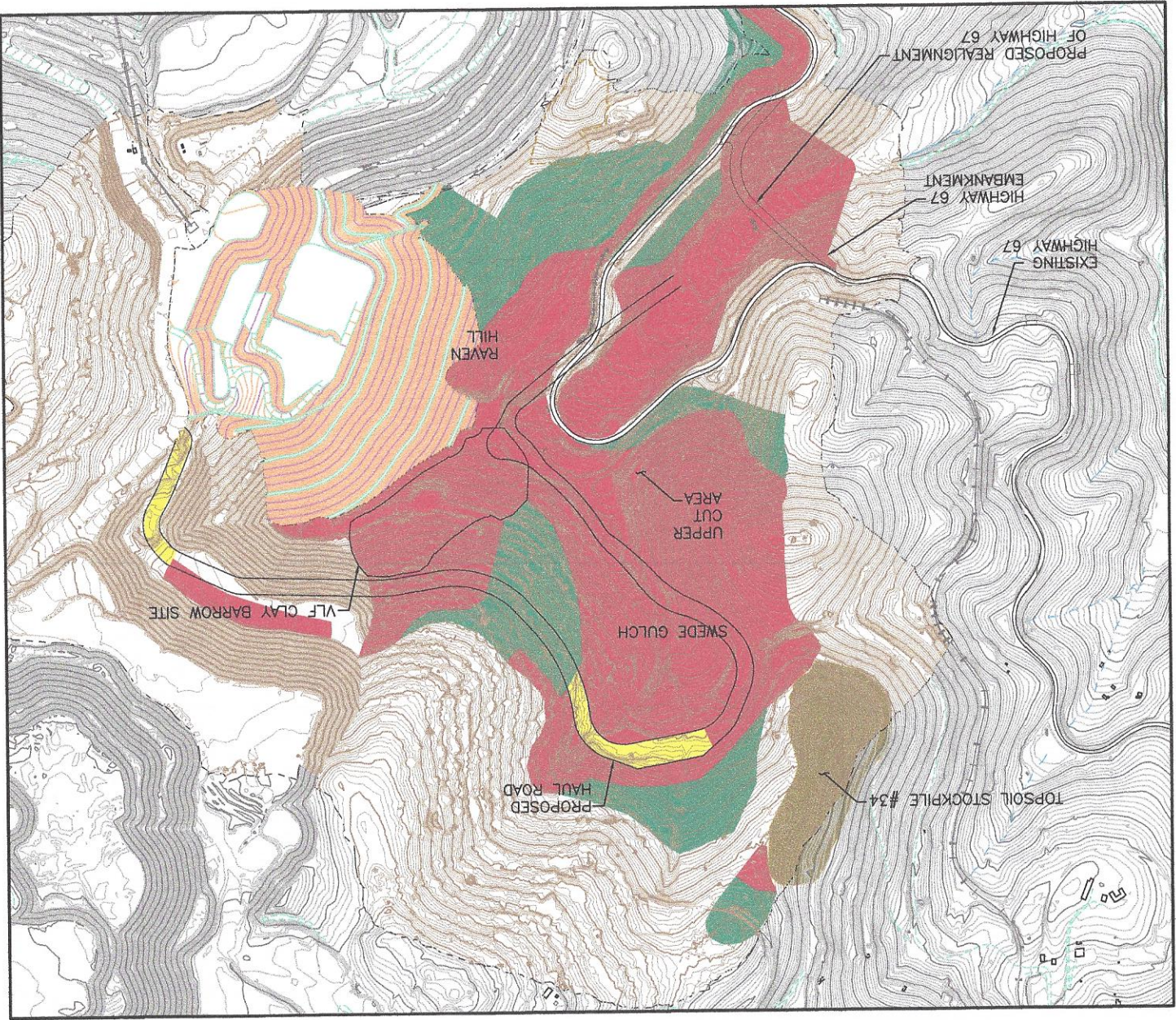


**Photo 2:** South Crib Wall - Geo-grid and basket placement.









# **LEGEND:**

- AREA OF CUT AND FILL
- CLEARING AND GRUBBING
- TOPSOIL STOCKPILE
- HAUL ROAD CUT/FILL

## **NOTE:**

AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.

CLIENT		CRIPPLE CREEK & VICTOR GOLD MINING COMPANY	
PROJECT		MILE 2 SQUAW GULCH	
TITLE		CLEARING, GRUBBING AND FILL AREAS	
DESIGNED BY	TAC	CHECKED BY	NR
DRAWN BY	MR	APPROVED BY	TAC
PROJECT NO.		8/20/15	
REV		1	
A			





**I) Earthworks**

## CONSTRUCTION ACTIVITIES and PROGRESS:

<b>Ambient Temperature Ranges for reporting period:</b>	<b>Low:</b> 48°F – 52°F <b>High:</b> 78°F – 79°F
<b>Weather conditions for reporting period:</b>	<b>Cloud Cover:</b> Partly Cloudy / Cloudy <b>Precipitation:</b> few isolated showers P.M. <b>Wind:</b> Calm to Gusts at times

D = Day Shift N = Night Shift w = Weather Day						
Days	Work Shifts					
	S	M	T	W	T	F
	-	-	D	D	D	D
	-	-	N	N	N	N

Reporting Period: 09.01.13 thru 09.07.13

<b>Owner:</b>	Cripple Creek & Victor Gold Mining Co.
<b>Project:</b>	Squaw Gulch (VLF), Hwy 67 Realignment
<b>Location:</b>	Cripple Creek & Victor Gold Mine, Colorado
<b>Contractor:</b>	Ames Construction Co. Inc.

**CRIPPLE CREEK & VICTOR GOLD MINING CO.**  
Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report





embankment as fill lifts were brought up. Progress is expected to continue. A Cat D6N was utilized to slope contour as the fill was brought up.

See Hwy 67 embankment fill below for additional detail on materials placed.

**Note:** An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F.

#### Clay (SLF) Processing:

**Cameron Site:** Clay processing continued during this reporting period.

**Squaw Gulch Clay Borrow Site:** Clay stripping and stockpiling occurred during this reporting period. A temporary access road was constructed though the clay borrow site using cut material imported from near stations 64+00 to 70+00 on the ADR haul road.

#### Underdrain System:

**Secondary Underdrain:** No work was performed on the Secondary underdrain during this reporting period.

A total of 1380 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** No work was performed on the temporary underdrain during this reporting period.

#### Tree/Slash Clearing, Chipping:

Seed Masters paused operations until further notice.

#### **B) Underground Workings**

Exploratory excavation was performed on underground working No. U6273 and No. U6274. These sites require further excavation and exploratory efforts.

Confirmatory drilling was performed on underground working No. 6167 and U6273. All drill hole locations were established on a 4-foot center isolating any voids found. Further remediation efforts will be ongoing until remediated. Summary of the remediation efforts will follow 100% remediation.

Underground Working No. 6147: The first layer of Geogrid was placed. Additional Geogrid layers are expected to be placed until 100% remediated.

Underground Working No. 6187: Three layers of Geogrid were placed, completing the remediation of this working.

No other sites were remediated during this reporting period.

#### **C) Highway 67**

A proof roll was performed on Wednesday 9.05.13 with an Ames' tandem water truck. The proof roll was observed by CC&V, Yeh and Associates, Amec, Ames and CDOT. Sub-base was approved for placement of Base materials, (Class 6, ABC)

Schmidt Construction began hauling Aggregate Base Course (ABC) material at approximately 07:00 from the Schmidt Pit located near Fountain, Colorado on September 6<sup>th</sup> 2013. The round trip took approximately 3 hours and





15 minutes. The ABC material was graded to a thickness of 6 inches from Stations 1009+50 to 1014+00 full width and form Stations 1014+00 to 1016+20 from center line left.

Schmidt's equipment consisted of a John Deere 310SG combination loader, A John Deere 672D grader, a Cat CS56 vibratory, 10-ton, smooth-drum roller, and a Cat 938G loader.

Ames used a DP 1500i to drill approximately 81 holes for the fence post on the west side of SH 67 realignment. The holes were drilled from Sta. 1010+75 to 1018+00. Borings were approximately 5 feet deep and spaced about 10 feet apart.

Ames also graded a 50 foot section adjacent to existing SH 67 allowing room for the guardrail end section at Station 1008+68 to be installed.

An approximately 6 inch thick layer of topsoil was placed on the lower portion of the downstream slope of the Highway 67 Realignment Embankment. A Cat D8T and Cat D6N (GPS) dozer placed the material working from the bottom up. The material was loaded by a Cat 320 excavator into a Cat 740 haul truck from the topsoil stockpile located next to the underdrain detention ponds at the base of the realignment embankment and transfer to the dozers. Topsoil placement is expected to continue.

Clearing and grubbing occurred below hwy 67 in preparation of fill placement at approximate Sta. 1029+00

#### South MSE Wall:

Ames continued mat and underdrain construction on the South MSE wall between approximate stations 0+40 thru 5+98

Mats were constructed by placing welded wire baskets along the exterior of the wall's alignment. The baskets were wire-tied together with approximately 2.5 inches of overlap. Approximately 7ft to 8ft foot lengths of Tensar UX1500 and UX1100 geogrid (per specification) were joined to the 18 inch wire welded basket leg lengths to create 8.5 to 9.5 foot reinforcement lengths for the wall. The Tensar geogrid was pulled taught against the wire baskets and secured by hand while placing reinforcing fill material. Tensar LH800 geogrid was installed on every other mat for the attachment of the timber facing. Locking tail struts were placed every 16 inches on center mechanically securing the geogrid to the baskets and reinforcing the front face of the basket. A tail strut was also added at the 2½ inch horizontal wire overlap of the basket. Face rock was placed in the wire baskets after lining the interior front face of the basket with BX1120 geogrid. Reinforcing fill material was separated from each other using non-woven geotextile material. The reinforcing fill material was placed in 9 inch lifts and packed with plate tampers within 3 feet of the wall face and with the CS-433 vibratory roller on the areas greater than 3 feet in distance from the wall face.

Each mat was tested for compaction and moisture content at the completion of mat prior to placement of next mat. Compaction tests performed met or exceeded 95% compaction. Reinforcing fill material was moisture conditioned prior to placement.

Ames continued placement of the underdrain at the back of the MSE wall along the face of existing rock. Non-woven geotextile was placed along a trench at the back of the wall where the reinforcing fill meets the native granite wall. Four inch diameter, perforated, corrugated, HDPE piping was laid out in the trench on top of the geotextile. Drain rock was placed over the pipe and wrapped with geotextile with a minimum of 18 inch overlap prior to placement of reinforcing fill. Reinforcing fill was placed in 9 inch lifts and compacted using a Cat CS433E smooth drum vibratory roller.

Approximately, 9,884 sq. ft. of wall face has been completed to date.

MSE wall components continue to be installed per plans and specifications.



## II) Storm Water Management

Best Management Practices (BMP) is being performed. Erosion control efforts took place during this reporting period following any precipitation.

## CQA ACTIVITIES:

I) **Field Activities:** Observation of construction activities during this reporting period included: topsoil/overburden stripping, production drilling and blasting, Cut to Fill ADR Haul Road (HR), HWY 67 construction, PSSA Toe Berm Fill placement and compaction, MSE wall construction, Underground remediation and clay processing.

II) **Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and field material sampling were performed during this reporting period.

LVSF: Sample No's 81 thru 83 were obtained during this reporting period  
SLF: Sample No. 49 and No. 50 were obtained during this reporting period  
DCF: Sample No. 1 thru 9 were obtained during this reporting period.  
RBF: Sample No. 3R was obtained and split with CDOT during this reporting period.  
Class 6: Sample No. 4 and 5 were obtained and split with CDOT during this reporting period.

## General Project Items

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on September 4<sup>th</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.  
A pre-paving meeting was held between CDOT, Ames, Amec, Yeh and Associates, Schmidt and CC&V on September 5<sup>th</sup>. Topics discussed were paving plan, any concerns or issues, safety and planning.

**Summary of Concerns:** None  
**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.  
**Miscellaneous:** None  
**Deliveries:** None

## CQA Monitor

Submitted by: Thorne M. Clark

Date: 09.07.13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

Approved By:

*Sue A. [Signature]*

Date: 9-23-13





ATTACHMENT A

AMFC - 2013 COA Field Staff Schedule MLE2

Name	Sept 1	Sept 2	Sept 3	Sept 4	Sept 5	Sept 6	Sept 7
Thorne Clark	-	-	PR	PR	-	PR	PR
Steve Rice	-	-	UG	UG	UG	UG	UG
Ben Melly	-	-	ST	ST	ST	ST	ST
Kevin Duarte	-	-	LG	LG	LG	-	LG
Uwe Kelley	-	-	ST	ST	ST	ST	-
Marcus Fernandez	-	-	LT	LT	LT	LT	-
Tyler Browning	-	-	ST	ST	ST	ST	ST
Ryan Fesler	-	-	LT	LT	LT	LT	LT
Robert Redd	-	-	UG	UG	UG	UG	UG
Razi Molloy	-	-	LT	LT	LT	LT	LT
Eric Lorensen	-	-	ST	ST	ST	ST	ST
**Fred Taylor	-	-	ST	ST	ST	ST	ST
*Reggie Long	-	-	ST	ST	ST	ST	ST

\*Night shift  
\*\*Yeh and Associates – Subcontractor HWY 67

LEGEND

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
UG = Underground Working Remediation  
SE = Senior Engineer

**Photographs of daily activities:**



**Photo 1:** Structural fill placement – Midway ADR Haul Road



**Photo 2:** Clearing and Grubbing – HWY 67, Prep for Silver Fill Placement.



**Photo 4:** Slope contouring – PSSA Toe Berm



**Photo 3:** Fence Post Drill Holes – HWY 67 Embankment



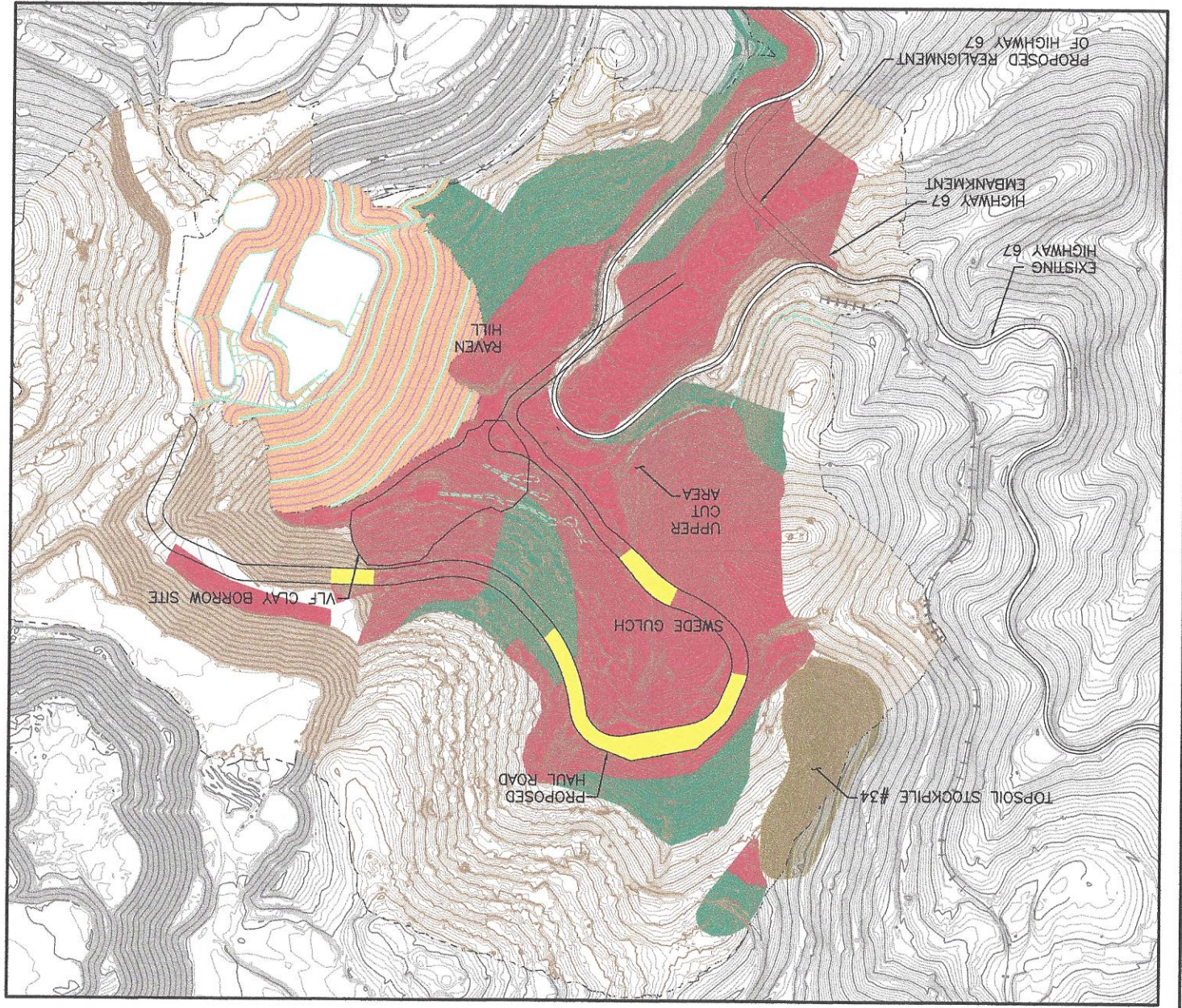


amc		PROJECT		DATE	
DESIGNED BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
DRAWN BY	DATE	APPROVED BY	DATE	APPROVED BY	DATE
PROJECT		PROJECT		PROJECT	
CLIENT		CLIENT		CLIENT	
TITLE		TITLE		TITLE	
CLEARING, GRUBBING AND FILL AREAS		CLEARING, GRUBBING AND FILL AREAS		CLEARING, GRUBBING AND FILL AREAS	
MILE 2 SQUAW GULCH		MILE 2 SQUAW GULCH		MILE 2 SQUAW GULCH	
GOLD MINING COMPANY		GOLD MINING COMPANY		GOLD MINING COMPANY	
CRIPPLE CREEK & VICTOR		CRIPPLE CREEK & VICTOR		CRIPPLE CREEK & VICTOR	
REV		REV		REV	
1		1		1	
A		A		A	

**LEGEND:**

- AREA OF CUT AND FILL
- CLEARING AND GRUBBING
- TOPSOIL STOCKPILE
- HAUL ROAD CUT/FILL

**NOTE:**  
AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.







**CRIPPLE CREEK & VICTOR GOLD MINING Co.**  
**Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**

<b>Owner:</b>	Cripple Creek & Victor Gold Mining Co.	<b>Project Number:</b>	74201125N0.****.****	<b>Date</b>	09.14.2013
<b>Project:</b>	Squaw Gulch (VLF), Hwy 67 Realignment	<b>Location:</b>	Cripple Creek & Victor Gold Mine, Colorado	<b>Contractor:</b>	Ames Construction Co. Inc.

Reporting Period: 09.08.13 thru 09.14.13											
Days			Work Shifts			D = Day Shift    N = Night Shift    w = Weather Day					
S	M	T	W	T	F	S	D	N	w	w	w
-	D	D	D	D	D	-	-	N	w	w	w

**Ambient Temperature Ranges for reporting period:**  
Low: 42°F – 46°F  
High: 55°F – 76°F  
**Weather conditions for reporting period:**  
Cloud Cover: Partly Cloudy / Cloudy  
Precipitation: showers  
Wind: Calm to Gusts at times

**Ames:** Daily Construction activities were limited on Thursday (9.12.13) and Friday (9.14.13) due to weather conditions. No construction activities occurred on Saturday (9.14.13) due to weather.  
**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**I) Earthworks**

**A) VLF (Phase I)**

**Topsoil / Overburden Stripping:** During this reporting period, topsoil materials were observed being stockpiled and hauled to area 34 stockpile from the midway area.  
**Production drilling:** No production drilling occurred during this reporting period. However production drilling is expected to continue.  
**Two production blasts'** occurred during this reporting period within planned VLF limits.

**Structural Fill:** The contractor continued fill operations and compaction by method specification for the ADR haul road and the PSSA toe berm.

Structural fill materials were hauled from cut near Phase II Diversion Pond then placed and compacted at approximate ADR haul road Sta. 49+00 – 53+00. A Cat D8T was used to spread the loose lifts and compaction was achieved utilizing a Cat 563 smooth drum roller by method specification.  
A cat D8T dozer was observed slope contouring the PSSA toe berm. Excess materials were used as fill and placed in 24 inch lifts and compacted by method specification utilizing a Cat CS56B Smooth Drum roller. It should be noted, fill placed for the PSSA Toe berm, was keyed into the existing HWY embankment as fill lifts were brought up. Progress is expected to continue.

See Hwy 67 embankment fill below for additional detail on materials placed.



**Note:** An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F.

#### Clay (SLF) Processing:

**Cameron Site:** Clay mining and processing continued during this reporting period.

**Squaw Gulch Clay Borrow Site:** Clay stockpiling occurred during this reporting period.

#### Underdrain System:

**Secondary Underdrain:** No work was performed on the Secondary underdrain during this reporting period.

A total of 1380 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** No work was performed on the temporary underdrain during this reporting period.

#### Tree/Slash Clearing, Chipping:

Seed Masters paused operations until further notice.

### **B) Underground Workings**

Confirmatory drilling was performed on underground working No. 6167 and No. U6273. All drill hole locations were established on a 4-foot center isolating any voids found. Further remediation efforts will be ongoing until remediated. Summary of the remediation efforts will follow 100% remediation.

Underground Working No. 6147 was 100% remediated with a two layer Geo-grid system. Underground Working No. 6051 was 100% remediated with a concrete plug and Cap.

No other sites were remediated during this reporting period.

### **C) Highway 67**

Schmidt Construction continued hauling and placing Aggregate Base Course (ABC) material from the Schmidt Pit located near Fountain, Colorado. During the reporting period Schmidt completed the placement and compaction of the ABC (Class 6) materials. Final proof roll will be determined during the next reporting period; progress was slowed due to weather conditions.

Schmidt's equipment consisted of a John Deere 310SG combination loader, A John Deere 672D grader, a Cat CS56 vibratory, 10-ton, smooth-drum roller, and a Cat 938G loader.

Material was cut from the north side of the existing Highway 67 near station 1029+00 on the realignment by a Cat 330 excavator and a Cat D8T (GPS) dozer. The material was loaded into tandem dump trucks and hauled directly across the Highway 67 roadway and used as fill. The fill was placed in approximately 24 inch lifts with a Cat D6 dozer and compaction was achieved utilizing a smooth-drum roller by method specification.

Approximately 6 inch thick layer of topsoil continue to be placed on the lower portion of the downstream slope of the Highway 67 Realignment Embankment. A Cat D8T and Cat D6N (GPS) dozer placed the material working from the bottom up. The material was loaded by a Cat 320 excavator into a Cat 740 haul truck from the topsoil stockpile located next to the underdrain detention ponds. Topsoil placement is expected to continue.





The contractor placed riprap materials at the culvert outlets located on the north side of the embankment.

Ideal Fencing installed fencing on the west side of the Highway 67 alignment during this reporting period. .

#### South MSE Wall:

Ames continued mat and underdrain construction on the South MSE wall.

Mats were constructed by placing welded wire baskets along the exterior of the wall's alignment. The baskets were wire-tied together with approximately 2.5 inches of overlap. Approximately 7ft to 8ft foot lengths of Tensar UX1500 and UX1100 geogrid (per specification) were joined to the 18 inch wire welded basket leg lengths to create 8.5 to 9.5 foot reinforcement lengths for the wall. The Tensar geogrid was pulled taught against the wire baskets and secured by hand while placing reinforcing fill material. Tensar LH800 geogrid was installed on every other mat for the attachment of the timber facing. Locking tail struts were placed every 16 inches on center mechanically securing the geogrid to the baskets and reinforcing the front face of the basket. A tail strut was also added at the 2½ inch horizontal wire overlap of the basket. Face rock was placed in the wire baskets after lining the interior front face of the basket with BX1120 geogrid. Reinforcing fill material was placed in the wire baskets after lining the interior face of the basket with BX1120 geogrid. The reinforcing fill material was placed in 9 inch lifts and packed with plate tampers within 3 feet of the wall face and with the CS-433 vibratory roller on the areas greater than 3 feet in distance from the wall face.

Each mat was tested for compaction and moisture content at the completion of mat prior to placement of next mat. Compaction tests performed met or exceeded 95% compaction. Reinforcing fill material was moisture conditioned prior to placement.

Ames continued placement of the underdrain at the back of the MSE wall along the face of existing rock. Non-woven geotextile was placed along a trench at the back of the wall where the reinforcing fill meets the native granite wall. Four inch diameter, perforated, HDPE piping was laid out in the trench on top of the geotextile. Drain rock was placed over the pipe and wrapped with geotextile with a minimum of 18 inch overlap prior to placement of reinforcing fill. Reinforcing fill was placed in 9 inch lifts and compacted using a Cat CS433E smooth drum vibratory roller. Approximately, 11,758 sq. ft. of wall face has been completed to date. MSE wall components continue to be installed per plans and specifications.

#### II) Storm Water Management

Best Management Practices (BMP) is being performed. Erosion control efforts took place during this reporting period following any precipitation.

#### COA ACTIVITIES:

- I) **Field Activities:** Observation of construction activities during this reporting period included: topsoil stripping/stockpiling, production drilling and blasting, Cut to Fill ADR Haul Road (HR), HWY 67 construction, PSSA Toe Berm Fill placement and compaction, MSE wall construction, Underground remediation, clay (SLF) processing and Drain Cover Fill (DCF) production and processing.
- II) **Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and field material sampling were performed during this reporting period.

SLF: Sample No. 51 was obtained during this reporting period  
DCF: Sample No. 10 and 11 were obtained during this reporting period.



RBF: Sample No. 4 was obtained and split with CDOT during this reporting period.

**General Project Items**

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on September 11<sup>th</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project issues, concerns and planning.

**Summary of Concerns:** None

**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.

**Miscellaneous:** None

**Deliveries:** None

**CQA Monitor**

**Submitted by:** Thorne M. Clark

**Date:** 09.14.13

Thorne M Clark

Project Resident Manager

Ph: 970.846.9337

**Approved By:**

*Scott Robinson*

**Date:** 9-30-13





ATTACHMENT A

AMEC - 2013 COA Field Staff Schedule MLE2

Name	Sept 8	Sept 9	Sept 10	Sept 11	Sept 12	Sept 13	Sept 14
Thorne Clark	-	PR	PR	PR	-	PR	-
Steve Rice	-	UG	UG	UG	UG	-	-
Ben Melly	-	ST	ST	-	-	-	-
Kevin Duarte	-	LG	-	LG	-	-	-
Marcus Fernandez	-	LT	LT	LT	LT	LT	-
Tyler Browning	-	ST	ST	ST	ST	ST	-
Ryan Fesler	-	LT	LT	LT	LT	-	-
Robert Redd	-	UG	UG	UG	UG	UG	-
Razi Molloy	-	LT	LT	LT	LT	LT	-
Eric Lorensen	-	ST	ST	ST	-	ST	-
**Fred Taylor	-	-	ST	ST	ST	ST	-
*Reggie Long	-	-	ST	ST	ST	-	-

\*Night shift

\*\*Yeh and Associates – Subcontractor HWY 67

LEGEND

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
UG = Underground Working Remediation  
SE = Senior Engineer

**Photo 2:** Structural fill placement – HWY 67 Sta. 1029+00



**Photo 1:** ADR haul road construction in near stations 47+00 to 53+00



**Photographs of daily activities:**





Photo 4: Fence Installation – HWY 67



Photo 3: Underground workings UG6167 (foreground) and UG U6273.

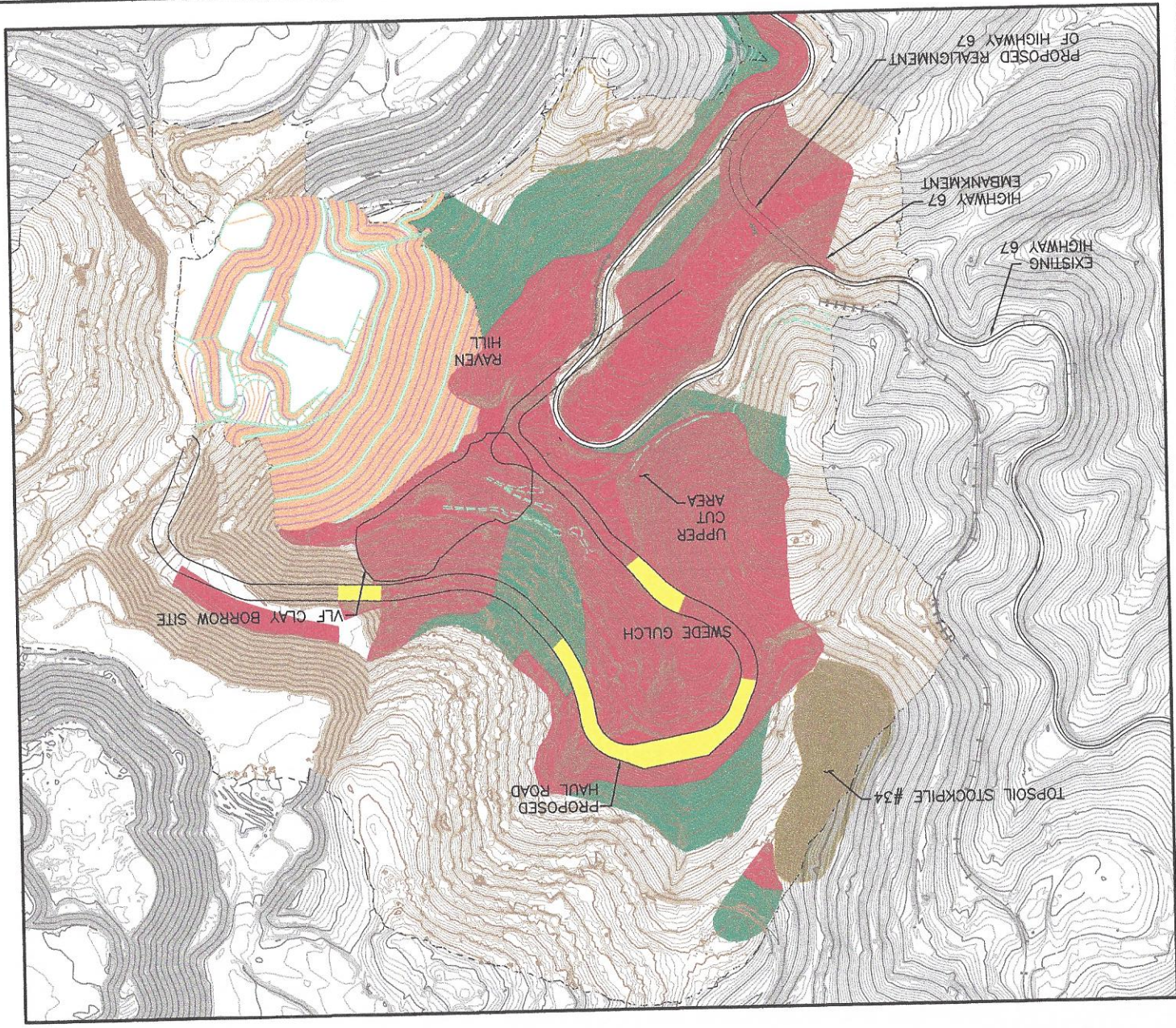




DATE	9/15/15	REV	1	FIGURE NO.	—
DESIGNED BY	TAC	CHECKED BY	MM	DATE	—
APPROVED BY	MM	DATE	9/15/15	REV	1
DATE	9/15/15	REV	1	FIGURE NO.	—



SUBJECT	CRIPPLE CREEK & VICTOR GOLD MINING COMPANY
PROJECT	MLE 2 SQUAW GULCH
TITLE	CLEARING, GRUBBING AND FILL AREAS



**NOTE:**  
AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.

- AREA OF CUT AND FILL
- CLEARING AND GRUBBING
- TOPSOIL STOCKPILE
- HAUL ROAD CUT/FILL

**LEGEND:**





**CRIPPLE CREEK & VICTOR GOLD MINING Co.**  
**Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**

<b>Owner:</b>	Cripple Creek & Victor Gold Mining Co.	<b>Project Number:</b>	74201125N0.****.****	<b>Date</b>	09.21.2013
<b>Project:</b>	Squaw Gulch (VLF), Hwy 67 Realignment	<b>Location:</b>	Cripple Creek & Victor Gold Mine, Colorado	<b>Contractor:</b>	Ames Construction Co. Inc.

**Reporting Period: 09.15.13 thru 09.21.13**

Days		Work Shifts		D = Day Shift    N = Night Shift    w = Weather Day						
S	M	T	W	T	F	S	-	w	N	N
D	D	D	D	D	D	D	-	w	N	N

<b>Ambient Temperature Ranges for reporting period:</b>	<b>Weather conditions for reporting period:</b>
<b>Low:</b> 33°F – 43°F <b>High:</b> 47°F – 66°F	<b>Cloud Cover:</b> Partly Cloudy / Cloudy <b>Precipitation:</b> showers <b>Wind:</b> Calm to Gusts at times

**Ames:** Construction activities were limited on Monday (9.16.13) due to weather conditions.

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**I) Earthworks**

**A) VLF (Phase I)**

**Topsoil / Overburden Stripping:** During this reporting period, topsoil materials were observed being stockpiled and hauled to area 34 stockpile from West of the Ball Mill Embankment toe, South of the Crib Wall.

**Production drilling:** No production drilling occurred during this reporting period.

**One production blast** occurred during this reporting period within planned VLF limits.

**Structural Fill:** The contractor continued fill operations and compaction by method specification for the ADR haul road and the PSSA toe berm.

Structural fill materials were placed and compacted for the ADR haul road. A Cat D8T was used to spread the loose lifts and compaction was achieved utilizing a Cat 563 smooth drum roller by method specification.

Structural fill materials were placed and compacted within the PSSA toe-berm. Excess materials were used as fill and placed in 24 inch lifts and compacted by method specification utilizing a Cat C56B Smooth Drum roller. It should be noted, fill placed for the PSSA Toe berm, was keyed into the existing HWY embankment as fill lifts were brought up. Progress is expected to continue.

See Hwy 67 embankment fill below for additional detail on materials placed.



Note: An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F.

#### Clay (SLF) Processing:

Cameron Site: Clay processing continued during this reporting period.

Squaw Gulch Clay Borrow Site: Clay stockpiling occurred during this reporting period.

#### Underdrain System:

Secondary Underdrain: Construction adjacent to Dump 4 at the toe of the Ball mill fill occurred during this reporting period.

A total of 1380 feet of Secondary underdrain has been completed.

Primary Underdrain: No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

Temporary Underdrain: No work was performed on the temporary underdrain during this reporting period.

#### Tree/Slash Clearing, Chipping:

Seed Masters paused operations until further notice.

#### **B) Underground Workings**

Confirmatory drilling was performed on underground working No. 6167 and No. U6273. All drill hole locations were established on a 4-foot center isolating any voids found. Further remediation efforts will be ongoing until remediated. Summary of the remediation efforts will follow 100% remediation.

Underground Working No. 6051 was 100% remediated with backfill.

Underground Working No. 6277 was 100% remediated with excavation and backfill.

No other sites were remediated during this reporting period.

#### **C) Highway 67**

An area located at approximate Sta. 1022+00 was identified as unacceptable; material was replaced with approved material then compacted. A proof roll was conducted on the placed and compacted ABC (Class 6) materials and approved for bottom mat placement.

Three areas within the placed and compacted ABC (Class 6) materials were potholed into the classified R-40 sub-base for sampling and testing for R-40 values. Potholes were restored and tack / sealant was applied in preparation for paving. Results of the samples will be forthcoming.

Paving began on the HWY 67 realignment. The bottom mat was laid in a 3 inch mat along the embankment portion of the project.

Guardrail was placed and installed along the embankment.

The area adjacent to the South MSE wall was graded for re-alignment, portions of the ditch lies between the MSE wall and the pavement was graded as-well.

Silver fill near Sta. 1029+00 was completed during this reporting period.



Approved By: \_\_\_\_\_

Date: 10-15-13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

**CQA Monitor**  
Submitted by: Thorne M. Clark

Date: 09.21.13

Deliveries: None

Miscellaneous: None

**Summary of Concerns:** None  
**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.

**General Project Items**  
**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on September 18<sup>th</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.

**SLF:** Sample No. 52 was obtained during this reporting period  
**DCF:** Sample No. 12 thru 20 were obtained during this reporting period.

- I) Field Activities:** Observation of construction activities during this reporting period included: topsoil stripping/stockpiling, production drilling and blasting, Cut to Fill ADR Haul Road (HR), HWY 67 construction, PSSA Toe Berm Fill placement and compaction, Underground remediation, clay (SLF) processing and Drain Cover Fill (DCF) production and processing.
- II) Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and field material sampling were performed during this reporting period.

## CQA ACTIVITIES:

Best Management Practices (BMP) is being performed. Erosion control efforts took place during this reporting period following any precipitation.

### II) Storm Water Management

**South MSE Wall:**  
The structural mat wire basket portion of the MSE wall was completed during this reporting period.

Excavation occurred around the existing crib wall exposing the timber facing in preparation of dismantling the wall.

The contractor continued spreading a 6 inch thick layer of topsoil on the downstream slope of the HWY embankment.





ATTACHMENT A

AMEC - 2013 COA Field Staff Schedule MLE2

Name	Sept 15	Sept 16	Sept 17	Sept 18	Sept 19	Sept 20	Sept 21
Thorne Clark	-	PR	PR	PR	-	PR	PR
Steve Rice	-	-	UG	UG	UG	-	-
Ben Melly	-	-	-	-	-	-	-
Kevin Duarte	-	-	-	LG	-	-	-
Marcus Fernandez	-	-	LT	LT	LT	LT	-
Tyler Browning	-	-	-	-	-	-	ST
Ryan Fesler	-	-	LT	LT	LT	-	LT
Robert Redd	-	UG	UG	UG	UG	UG	-
Razi Molloy	-	LT	LT	LT	LT	LT	LT
Eric Lorensen	-	-	ST	ST	-	ST	ST
**Fred Taylor	-	-	ST	ST	ST	ST	ST
*Reggie Long	-	-	ST	ST	ST	ST	ST

\*Night shift

\*\*Yeh and Associates – Subcontractor HWY 67

LEGEND

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
UG = Underground Working Remediation  
SE = Senior Engineer





Photographs of daily activities:



Photo 4: Guardrail Installation – HWY 67



Photo 3: HWY 67 Embankment Paving Bottom 3 inch Mat







**CRIPPLE CREEK & VICTOR GOLD MINING Co.**  
**Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**

<b>Owner:</b>	Cripple Creek & Victor Gold Mining Co.
<b>Project:</b>	Squaw Gulch (VLF), Hwy 67 Realignment
<b>Location:</b>	Cripple Creek & Victor Gold Mine, Colorado
<b>Contractor:</b>	Ames Construction Co. Inc.

**Reporting Period: 09.22.13 thru 09.28.13**

Days		D = Day Shift    N = Night Shift    W = Weather Day						
Work Shifts		-	D	D	D	D	N	N
S	M	T	W	T	F	S	D	D

<b>Ambient Temperature Ranges for reporting period:</b>	<b>Weather conditions for reporting period:</b>
<b>Low:</b> 33°F – 41°F <b>High:</b> 47°F – 69°F	<b>Cloud Cover:</b> Partly Cloudy / Cloudy <b>Precipitation:</b> Drizzle <b>Wind:</b> Calm to Gusts at times

**Ames:** Continuing construction tasks for HWY 67 and VLF.

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**I) Earthworks**

**A) VLF (Phase I)**

**Topsoil / Overburden Stripping:** During this reporting period, topsoil materials were observed being stockpiled and hauled to area 34 stockpile from "FF" Bench, West of the Ball Mill Embankment toe, South of the Crib Wall.

**Production drilling:** Drill rigs were observed drilling near bench "C" Approximate Sta. 14+00

Three production blasts occurred during this reporting period within planned VLF limits.

**Structural Fill:** The contractor continued fill operations and compaction by method specification for the ADR haul road and planned VLF 2:1 slope near "E" and "F" bench.

Structural fill materials were placed and compacted for the ADR haul road. A Cat D8T was used to spread the loose lifts and compaction was achieved utilizing a Cat 563 smooth drum roller by method specification.

Structural fill materials were placed from 2:1 cut then compacted along "E" and "F" bench. Materials used as fill were placed in 24 inch loose lifts and compacted by method specification utilizing a Cat CS56B Smooth Drum roller

See Hwy 67 embankment fill below for additional detail on materials placed.

**Note:** An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F.



**Clay (SLF) Processing:**

**Cameron Site:** Clay processing continued during this reporting period.

**Squaw Gulch Clay Borrow Site:** Overburden stripping occurred during this reporting period.

**Underdrain System:**

**Secondary Underdrain:** No work was performed on the Secondary underdrain during this reporting period.

A total of 1380 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** No work was performed on the temporary underdrain during this reporting period.

**Tree/Slash Clearing, Chipping:**

Seed Masters paused operations until further notice.

**B) Underground Workings**

Confirmatory drilling was not performed during this reporting period.

Exploratory excavation occurred on underground working No. 6167 and No. U6273. Materials removed were used as fill within the ADR haul road. Further remediation efforts will be ongoing until remediated. Summary of the remediation efforts will follow 100% remediation. In addition underground working No. 6202 is known as a slope/adit continue to be excavated in preparation of exploratory drilling

No other sites were remediated during this reporting period.

**C) Highway 67**

The bottom mat was laid in a 3 inch mat along both lanes of the embankment portion of the project.

Existing asphalt was cut and removed from the south side of Hwy 67 to facilitate the tie-in with the existing Hwy 67. Areas of unsuitable materials were removed and replaced with approved materials. The fill was compacted and proof-rolled.

Signs, delineators and lane dividers were installed along the paved portion of the highway.

The contractor installed the RCP collar and inlet at Sta. 1028+50 on the shoulder of the northbound side of the existing highway.

The contractor continued spreading a 6 inch thick layer of topsoil on the downstream slope of the HWY embankment.

**South MSE Wall:**

Awaiting concrete leveling pad and timber facade placement.





## II) Storm Water Management

Best Management Practices (BMP) is being performed. Erosion control efforts took place during this reporting period following any precipitation.

## CQA ACTIVITIES:

I) **Field Activities:** Observation of construction activities during this reporting period included: topsoil stripping/stockpiling, production drilling and blasting, Cut to Fill - ADR Haul Road (HR) and VLF, HWY 67 construction, Underground remediation, clay (SLF) processing and Drain Cover Fill (DCF) production and processing.

II) **Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and identification and field material sampling were performed during this reporting period.

SLF: Sample No. 53 and 54 was obtained during this reporting period  
DCF: Sample No. 21 and 22 were obtained during this reporting period.

## General Project Items

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on September 25<sup>th</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.

**Summary of Concerns:** None  
**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.  
**Miscellaneous:** None  
**Deliveries:** None

## CQA Monitor

Submitted by: Thorne M. Clark

Date: 09.28.13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

Approved By:

*Scott Adams*

Date: 10-15-13



ATTACHMENT A

AMEC - 2013 COA Field Staff Schedule MLE2



Name	Sept 22	Sept 23	Sept 24	Sept 25	Sept 26	Sept 27	Sept 28
Thorne Clark	-	PR	PR	PR	-	PR	PR
Steve Rice	-	-	UG	UG	UG	UG	-
Ben Melly	-	-	-	-	-	-	-
Marcus Fernandez	-	LG	LG	LG	LG	LG	LG
Tyler Browning	-	LT	LT	LT	LT	-	LT
Ryan Fesler	-	ST	ST	ST	ST	ST	ST
Robert Redd	-	-	LT	LT	LT	LT	LT
Razi Molloy	-	UG	UG	UG	UG	UG	-
Eric Lorensen	-	LT	LT	LT	-	-	-
**Fred Taylor	-	ST	ST	ST	ST	ST	ST
*Reggie Long	-	ST	ST	ST	ST	ST	ST

\*Night shift

\*\*Yeh and Associates – Subcontractor HWY 67

LEGEND

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
UG = Underground Working Remediation  
SE = Senior Engineer



**Photo 2:** South end of embankment HWY 67 prep for paving



**Photo 1:** ADR Haul Road Fill



**Photographs of daily activities:**





**Photo 4:** Production Drilling



**Photo 3:** Underground Workings UG#6167 and UG#U6273 – Shot rock removal







**CRIPPLE CREEK & VICTOR GOLD MINING Co.**  
**Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**

<b>Owner:</b>	Cripple Creek & Victor Gold Mining Co.	<b>Project Number:</b>	74201125N0. ****. ****	<b>Date</b>	10.05.2013
<b>Project:</b>	Squaw Gulch (VLF), Hwy 67 Realignment	<b>Location:</b>	Cripple Creek & Victor Gold Mine, Colorado		
<b>Contractor:</b>	Ames Construction Co. Inc.				

Reporting Period: 09.29.13 thru 10.05.13											
Days			Work Shifts			D = Day Shift    N = Night Shift    w = Weather Day					
S	M	T	W	T	F	S	D	D	D	N	N
S	M	T	W	T	F	S	D	D	D	N	N

**Ambient Temperature Ranges for reporting period:**  
Low: 25°F – 40°F  
High: 48°F – 67°F

**Weather conditions for reporting period:**  
Cloud Cover: Partly Cloudy / Cloudy  
Precipitation: None  
Wind: Calm to Gusts at times

**Ames:** Continuing construction tasks for HWY 67 and VLF.

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**I) Earthworks**

**A) VLF (Phase I)**

**Topsoil / Overburden Stripping:** During this reporting period, topsoil materials were observed being hauled to area 34 stockpile from Bench "D" east of the existing crib wall and Bench "C" Sta. C8+00.

**Production drilling:** Occurred during this reporting period within the planned VLF limits.

**Three production blasts'** occurred during this reporting period within planned VLF limits.

**Structural Fill:** The contractor continued fill operations and compaction by method specification for the ADR haul road and planned VLF 2:1 slope near "C" bench.

Structural fill materials were placed and compacted for the ADR haul road. A Cat D8T was used to spread the loose lifts and compaction was achieved utilizing a Cat 563 smooth drum roller by method specification.

Structural fill materials were placed from 2:1 cut then compacted near "C" bench close to midway. Materials used as fill were placed in 24 inch loose lifts and compacted by method specification utilizing a Cat CS56B Smooth Drum roller

See Hwy 67 embankment fill below for additional detail on materials placed.

**Note:** An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F.



#### Clay (SLF) Processing:

**Cameron Site:** Clay processing continued during this reporting period.

**Squaw Gulch Clay Borrow Site:** Overburden removal occurred during this reporting period.

#### Underdrain System:

**Secondary Underdrain:** Installed between the Ball Mill fill and Dump No. 4 in addition installation occurred at Station 46+00 below the ADR haul road.

Approximate total of 1580 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** No work was performed on the temporary underdrain during this reporting period.

#### Tree/Slash Clearing, Chipping:

Seed Masters paused operations until further notice.

#### **B) Underground Workings**

Confirmatory drilling was performed on underground working No. 6011, No. 6062. All drill hole locations were established on a 4-foot center isolating any voids found. Further remediation efforts will be ongoing until remediated. Summary of the remediation efforts will follow 100% remediation.

Blasted rock was excavated and removed from UG Working No. 6167 and No. U6273. Materials removed were used as fill. 191 cubic yards of concreted was placed in UG U6273

Anacanda Mine: Blasting occurred on 10.3.13. Loose materials were scaled and pushed from the sides as remediation efforts continue.

#### **C) Highway 67**

Topsoil material was spread over the slope within the natural gas line right-of-way, in addition to portions of the slope above the south MSE wall were covered as-well.

Subgrade was graded and proof rolled for Class 6 (ABC) material placement.

Class 6 (ABC) materials was placed on the victor (South) side of the realignment at Sta. 1027+50 to Sta. 1031+50 in preparation of pavement tie-in.

Ditch grading occurred and connected to the culvert near Sta 1021+00

An inlet located at Sta. 1028+03 was excavated and filled with slurry.

Topsoil placement on downstream slope was completed during this reporting period.

#### **South MSE Wall:**

No progress occurred during this reporting period. Progress is waiting on leveling mat construction and timber connection placement.





## II) Storm Water Management

Best Management Practices (BMP) is being performed. Erosion control efforts took place during this reporting period following any precipitation.

## CQA ACTIVITIES:

I) **Field Activities:** Observation of construction activities during this reporting period included: topsoil haul, production drilling and blasting, Cut to Fill ADR Haul Road (HR), HWY 67 construction, Underground remediation, clay (SLF) processing and Drain Cover Fill (DCF) production and processing.

II) **Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and field material sampling were performed during this reporting period.

SLF: Sample No. 55 thru 57 was obtained during this reporting period  
DCF: Sample No. 23 thru 26 was obtained during this reporting period.

## General Project Items

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on October 2<sup>nd</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.

**Summary of Concerns:** None  
**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.  
**Miscellaneous:** None  
**Deliveries:** None

## CQA Monitor

Submitted by: Thorne M. Clark

Date: 10.05.13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

Approved By:

*Scott Redding*

Date: 10-23-13



ATTACHMENT A

AMEC - 2013 COA Field Staff Schedule MLE2

Name	Sept 29	Sept 30	Sept 31	Sept 01	Sept 02	Sept 03	Sept 04
Thorne Clark	PR	PR	PR	PR	PR	PR	PR
Steve Rice	-	UG	UG	UG	UG	UG	UG
Ben Melly	-	-	-	-	LG	LG	LG
Marcus Fernandez	-	ST	ST	ST	ST	ST	ST
Tyler Browning	-	LT	LT	LT	LT	LT	LT
Ryan Fesler	-	ST	ST	ST	ST	ST	ST
Robert Redd	-	UG	UG	UG	UG	UG	UG
Razi Molloy	-	LT	LT	LT	LT	LT	LT
Eric Lorensen	-	ST	ST	ST	ST	ST	ST
**Fred Taylor	-	ST	ST	ST	ST	ST	ST
*Reggie Long	ST	ST	ST	ST	ST	ST	ST

\*Night shift

\*\*Yeh and Associates – Subcontractor HWY 67

LEGEND

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
UG = Underground Working Remediation  
SE = Senior Engineer







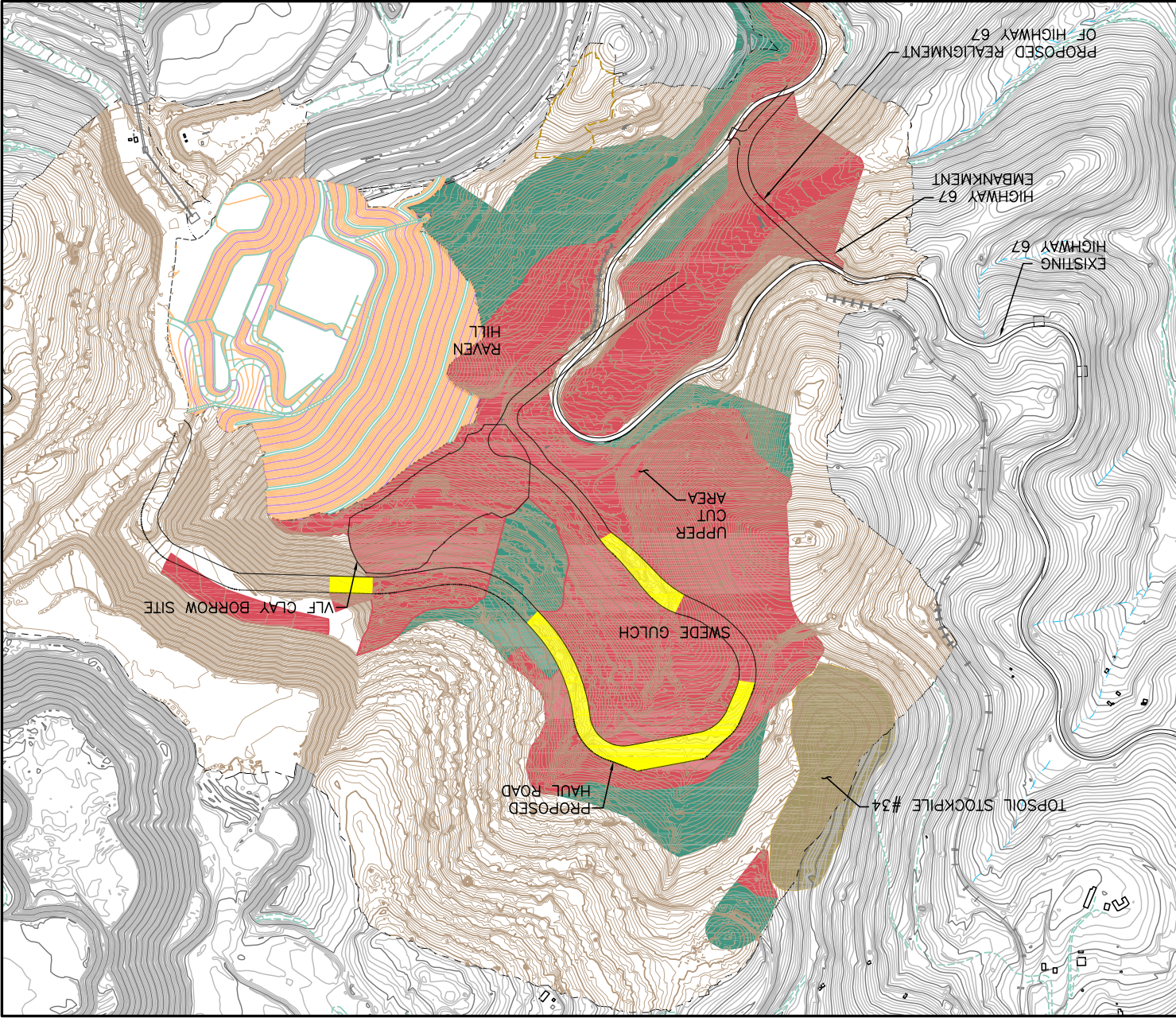
Photo 4: Concrete placement UG6167



Photo 3: Topsoil placement (Natural Gas Line ROW)







CLIENT		PROJECT		TITLE	
CRIPPLE CREEK & VICTOR		MILE 2 SQUAW GULCH		CLEARING, GRUBBING AND FILL AREAS	
DESIGNED BY		CHECKED BY		DATE	
DRAWN BY		APPROVED BY		10/03/13	
FILENAME		FIGURE NO.		REV	
—		1		A	



**LEGEND:**

- AREA OF CUT AND FILL
- CLEARING AND GRUBBING
- TOPSOIL STOCKPILE
- HAUL ROAD CUT/FILL

**NOTE:**

AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.





**CRIPPLE CREEK & VICTOR GOLD MINING Co.**  
**Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**

<b>Owner:</b>	Cripple Creek & Victor Gold Mining Co.	<b>Project Number:</b>	74201125N0.****.****	<b>Date</b>	10.12.2013
<b>Project:</b>	Squaw Gulch (VLF), Hwy 67 Realignment	<b>Location:</b>	Cripple Creek & Victor Gold Mine, Colorado	<b>Contractor:</b>	Ames Construction Co. Inc.

**Reporting Period: 10.06.13 thru 10.12.13**

Days		S	M	T	W	T	F	S
Work Shifts		-	D	D	D	D	D	D
		-	N	N	N	N	N	N
D = Day Shift		N = Night Shift						
		w = Weather Day						

**Ambient Temperature Ranges for reporting period:**  
**Low:** 25°F – 35°F  
**High:** 48°F – 63°F

**Weather conditions for reporting period:**  
**Cloud Cover:** Partly Cloudy / Cloudy  
**Precipitation:** Rain/Snow  
**Wind:** Calm to Gusts at times

**Ames:** Continuing construction tasks for HWY 67 and VLF.

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**I) Earthworks**

**A) VLF (Phase I)**

**Topsoil / Overburden Stripping:** During this reporting period, topsoil materials were observed being hauled to area 34 stockpile from west of the crib wall and near Bench "C".

**Production drilling:** Occurred during this reporting period within the planned VLF limits.

**Three production blasts'** occurred during this reporting period within planned VLF limits.

**Structural Fill:** The contractor continued fill operations and compaction by method specification for the ADR haul road the PSSA Toe Berm and the planned VLF 2:1 slope near "C" and "F" bench. In addition slope grading occurred on the PSSA toe berm.

Structural fill materials were placed and compacted for the ADR haul road. A Cat D8T was used to spread the loose lifts and compaction was achieved utilizing a Cat 563 smooth drum roller by method specification.

Structural fill materials were placed from 2:1 cut then compacted near "C" and "F" bench close to midway. Materials used as fill were placed in 24 inch loose lifts and compacted by method specification utilizing a Cat CS56B Smooth Drum roller

See Hwy 67 embankment fill below for additional detail on materials placed.





**Note:** An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F.

**Clay (SLF) Processing:**

**Cameron Site:** Clay processing continued during this reporting period.

**Squaw Gulch Clay Borrow Site:** Overburden removal occurred during this reporting period.

**Underdrain System:**

**Secondary Underdrain:** Installation occurred at Station 46+00 below the ADR haul road. Approximately 546 feet of secondary underdrain was installed during this reporting period.

Approximate total of 2126 feet of Secondary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Temporary Underdrain:** No work was performed on the temporary underdrain during this reporting period.

**Tree/Slash Clearing, Chipping:**

Seed Masters paused operations until further notice.

**B) Underground Workings**

No Confirmatory drilling was performed during this reporting period.

Concrete plug was placed in UG No. 6167 and excavation of shot rock continued in UG No. 6273

Blasting occurred on UG working site 6011 and 6202 then excavated shot rock as remediation continued.

UG No. 6153: Camera exploration occurred resulting in a planned a concrete plug and Cemented Rock Fill cap.

Anacanda Mine: Loose materials were scaled and pushed from the sides as remediation efforts continue.

**C) Highway 67**

Topsail material was spread over the slope above the realignment near Sta. 1028+50 and 1031+00.

Subgrade was finalized and approved for paving on the victor (South) side of the realignment.

Bottom Mat of pavement was placed adjacent to the MSE wall.

Material was removed and replaced in the southbound lane in preparation of tie-into existing asphalt.

Four 30 inch diameter, 8 foot long sections of RCP were placed under the Southbound lane near Sta. 1028+50.

Asphalt was removed from the Cripple Creek-side tie-in on the Hwy 67 realignment. A newly discovered crib wall was exposed after removing the existing pavement. The contractor placed a two layer geogrid system over the crib-wall, then backfilled with approved sub-base materials and low-volume fill. A proof roll was performed and approved by Reggie Long (Amec), Fred Taylor (Yeh and Associates) and Rick Raebel (CDOT) for temporary traffic.



Schmidt placed additional Class 6 material on the Victor-side tie-in for final grading prior to upcoming pavement operations scheduled for Sunday, October 13<sup>th</sup>, 2013.

**South MSE Wall:**

No progress occurred during this reporting period. Progress is waiting on leveling mat construction and timber connection placement.

**II) Storm Water Management**

Best Management Practices (BMP) is being performed. Erosion control efforts took place during this reporting period following any precipitation.

**CQA ACTIVITIES:**

**I) Field Activities:** Observation of construction activities during this reporting period included: topsoil haul, production drilling and blasting, Cut to Fill ADR Haul Road (HR), HWY 67 construction, Underground remediation, clay (SLF) processing and Drain Cover Fill (DCF) production and processing.

**II) Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and identification and field material sampling were performed during this reporting period.

**SLF:** Sample No. 58 thru 59 was obtained during this reporting period  
**DCF:** Sample No. 27 thru 28 was obtained during this reporting period.

**General Project Items**

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on October 9<sup>th</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.  
**Summary of Concerns:** None  
**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.  
**Miscellaneous:** None  
**Deliveries:** None

**CQA Monitor**

**Submitted by:** Thorne M. Clark  
**Thorne M Clark**  
**Project Resident Manager**  
Ph: 970.846.9337

**Approved By:**

*Scott Rudolph*

**Date:** 10-23-13

**Date:** 10.12.13





ATTACHMENT A

AMEC - 2013 COA Field Staff Schedule MLE2

Name	Oct 6	Oct 7	Oct 8	Oct 9	Oct 10	Oct 11	Oct 12
Thorne Clark	-	PR	PR	PR	PR	PR	PR
Steve Rice	-	UG	UG	UG	UG	UG	-
Ben Melly	-	LG	LG	-	-	LG	-
Marcus Fernandez	-	-	-	-	-	ST	ST
Tyler Browning	-	-	-	-	-	-	-
Ryan Fesler	-	ST	ST	ST	ST	ST	ST
Robert Redd	-	UG	UG	UG	UG	UG	UG
Razi Molloy	-	LT	LT	LT	LT	LT	LT
Eric Lorensen	-	ST	ST	ST	ST	ST	ST
**Fred Taylor	-	ST	ST	ST	ST	ST	-
*Reggie Long	-	ST	ST	ST	ST	ST	ST

\*Night shift

\*\*Yeh and Associates – Subcontractor HWY 67

LEGEND

PS = Project Sponsor  
PCE = Project Certifying Engineer  
PM = Project Manager  
PR = Project Resident  
LS = Lead Soils Engineer  
LG = Lead Geosynthetics Engineer  
ST = Soil Technician  
LT = Laboratory Technician  
GT = Geosynthetics Technician  
FLM= Field/Laboratory Manager  
UG = Underground Working Remediation  
SE = Senior Engineer

Photographs of daily activities:



Photo 1: PSSA Toe berm fill placement



Photo 2: ADR Haul Road fill placement



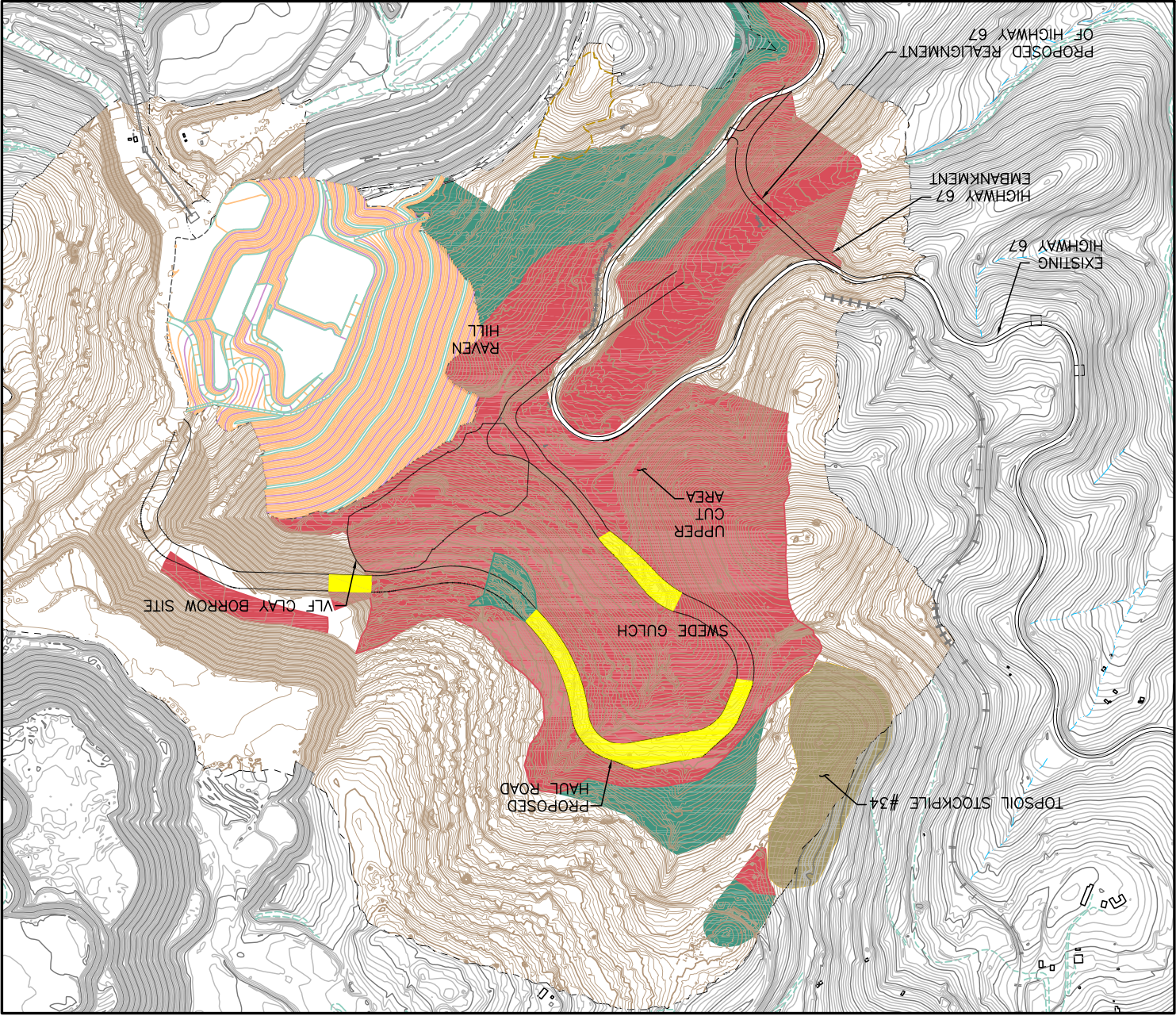
Photo 4: VLF fill grading operations



Photo 3: Secondary Underdrain construction







**LEGEND:**

- AREA OF CUT AND FILL
- CLEARING AND GRUBBING
- TOPSOIL STOCKPILE
- HAUL ROAD CUT/FILL

**NOTE:**

AREAS SHOWN ARE APPROXIMATE AND NOT TO BE USED AS ACTUAL DESIGN PURPOSES.



DESIGNED BY	TMC	CHECKED BY	HR	DATE
DRAWN BY	MF	APPROVED BY	TMC	10/12/13
FILENAME	1			
FIGURE NO.	A			

CLEARING, GRUBBING AND FILL AREAS

MLE 2 SQUAW GULCH

CRIPPLE CREEK & VICTOR  
GOLD MINING COMPANY



**Topsoil / Overburden Stripping:** During this reporting period, topsoil materials were observed being stripped near Sta. A8+00 and A10+00 within the VLF limits.

**Production drilling:** Occurred during this reporting period within the planned VLF limits.

**Four production blasts'** occurred during this reporting period within planned VLF limits.

**Structural Fill:** The contractor continued fill operations and compaction by method specification for the ADR haul road the PSSA Toe Berm and the planned VLF slope near "A" bench Sta. A5+00. In addition slope grading occurred on the PSSA toe berm.

Structural fill materials were placed and compacted for the ADR haul road. A Cat D8T was used to spread the loose lifts and compaction was achieved utilizing a Cat 563 smooth drum roller by method specification.

Structural fill materials were placed from existing railroad cut then compacted near "A" Sta. A5+00 bench. Materials used as fill were placed in 24 inch loose lifts and compacted by method specification utilizing a Cat CS56B Smooth Drum roller.

Grading occurred on the VLF slope between ADR haul road Sta. 64+00 and Sta. 22+00. Materials generated were used as fill adjacent and below dump 4. Compacted was achieved by method specification utilizing a smooth drum roller.

**A) VLF (Phase I)**

**I) Earthworks**

**CONSTRUCTION ACTIVITIES and PROGRESS:**

**Planning:** Continuing Construction activities and scheduling for VLF and HWY 67.

**Ames:** Continuing construction tasks for HWY 67 and VLF.

**Ambient Temperature Ranges for reporting period:**  
 Low: 19°F - 28°F  
 High: 33°F - 53°F

**Weather conditions for reporting period:**  
 Cloud Cover: Partly Cloudy / Cloudy  
 Precipitation: Rain/Snow  
 Wind: Calm to Gusts at times

Days		Work Shifts		D = Day Shift N = Night Shift w = Weather Day	
S	M	T	W	T	F
S	D	D	D	D	D
-	N	N	N	N	N

**Reporting Period: 10.13.13 thru 10.19.13**

**Owner:** Cripple Creek & Victor Gold Mining Co.  
**Project:** Squaw Gulch (VLF), Hwy 67 Realignment  
**Location:** Cripple Creek & Victor Gold Mine, Colorado  
**Contractor:** Ames Construction Co. Inc.

**Project Number:** 74201125N0. \*\*\*\*. \*\*\*\*  
**Date:** 10.19.2013

**CRIPPLE CREEK & VICTOR GOLD MINING Co.**  
**Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report**



Overlook excavation took place and replaced unsuitable materials with approved sub-base materials, Class 6 (ABC) were placed and compacted, followed by a proof roll and approved for bottom mat asphalt placement. A 3 inch bottom mat of Asphalt was placed during the reporting period for the victor (South) tie-in area and the Cripple Creek (North) tie-in area.

Culvert installation occurred at the overlook Sta. 11+00.

### C) Highway 67

Underground working No. 6289, No. 6290 and No. 6279 are pending further remediation efforts. Underground working No. 6284, No. 6286, No. 6287 and No. 6288 were excavated to competent bedrock, then backfilled and compacted completing the listed working and are considered remediated.

Cemented Rockfill placement continues for UG No. 6167 and No. U6273.

Confirmatory drilling was performed during this reporting period on underground working No. 6268, No. 6283, No. U6280. All drill hole locations were established on a 4-foot center isolating any voids found. Further remediation efforts will be ongoing until remediated. Summary of the remediation efforts will follow 100% remediation.

Exploratory excavation was performed on underground working No. 6011, No. U6281, No. 6003, No. 6004 and No. 6202. These sites require further remediation efforts until considered remediated.

### B) Underground Workings

**Tree/Slash Clearing, Chipping:** Trees were removed along the former hwy67 roadway below the uppercut area and west of the crib wall then hauled to the area 34 stockpile.

**Temporary Underdrain:** No work was performed on the temporary underdrain during this reporting period.

A total of 1280 feet of Primary underdrain has been completed.

**Primary Underdrain:** No work was performed on the Primary underdrain during this reporting period.

Approximate total of 2126 feet of Secondary underdrain has been completed.

**Underdrain System:** **Secondary Underdrain:** No work was performed on the Secondary underdrain during this reporting period.

**Squaw Gulch Clay Borrow Site:** Overburden removal occurred during this reporting period.

**Clay (SLF) Processing:** **Cameron Site:** Clay processing continued during this reporting period.

**Note:** An Amec field representative monitored structural fill material temperatures placed within the areas of fill during all shifts. Average structural fill temperatures were above 32°F.

See Hwy 67 embankment fill below for additional detail on materials placed.

A cat D6N GPS was utilized for slope contouring for the Phase I and II ponds.







topsoil material was spread along the North bound travel lane shoulder. Erosion protectors were installed along the guardrail and sign bases were installed adjacent to the South MSE Wall.

#### **South MSE Wall:**

No progress occurred during this reporting period. Progress is waiting on leveling mat construction and timber connection placement.

#### **II) Storm Water Management**

Best Management Practices (BMP) is being performed. Erosion control efforts took place during this reporting period following any precipitation.

#### **CQA ACTIVITIES:**

**I) Field Activities:** Observation of construction activities during this reporting period included: topsoil stripping, production drilling and blasting, VLF/PSSA Cut to Fill and compaction, HWY 67 construction, Underground remediation, clay (SLF) processing.

**II) Laboratory Activities:** Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and field material sampling were performed during this reporting period.

**SLF:** Sample No. 60 thru 61 was obtained during this reporting period  
**DCF:** Sample No. 29 was obtained during this reporting period.

**Cdot:** Split sample of reinforced backfill (RFB-4) material was obtained and re-tested during this reporting period.

#### **General Project Items**

**Meetings and Discussions:** Weekly Project Status meeting was held at 10:00am on October 16<sup>th</sup> between CC&V, Ames, CDOT and Amec. Topics discussed were Safety, Schedule, Project Issues, concerns and planning.

**Summary of Concerns:** None  
**CC&V:** Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.  
**Miscellaneous:** None  
**Deliveries:** None

#### **CQA Monitor**

**Submitted by:** Thorne M. Clark

**Date:** 10.19.13

Thorne M Clark  
Project Resident Manager  
Ph: 970.846.9337

**Approved By:**

*Scott Galt*

**Date:** 10-31-13

PS = Project Sponsor  
 PCE = Project Certifying Engineer  
 PM = Project Manager  
 PR = Project Resident  
 LS = Lead Soils Engineer  
 LG = Lead Geosynthetics Engineer  
 ST = Soil Technician  
 LT = Laboratory Technician  
 GT = Geosynthetics Technician  
 FLM= Field/Laboratory Manager  
 UG = Underground Working Remediation  
 SE = Senior Engineer

**LEGEND**

\*Night shift  
 \*\*Yeh and Associates – Subcontractor HWY 67

Name	Oct 13	Oct 14	Oct 15	Oct 16	Oct 17	Oct 18	Oct 19
Thorne Clark	PR	PR	PR	PR	PR	-	-
Steve Rice	-	UG	UG	UG	UG	UG	UG
Ben Melly	-	-	-	-	-	-	-
Marcus Fernandez	-	ST	ST	ST	ST	-	-
Tyler Browning	ST	ST	ST	ST	-	ST	ST
Ryan Fesler	-	ST	ST	ST	ST	-	-
Robert Redd	-	UG	UG	UG	UG	UG	-
Razi Molloy	-	LT	LT	LT	LT	LT	LT
Eric Lorensen	-	ST	ST	ST	ST	ST	ST
**Fred Taylor	ST	ST	ST	ST	ST	ST	ST
*Reggie Long	ST	ST	ST	ST	ST	ST	ST

AMEC - 2013 COA Field Staff Schedule MLE2

ATTACHMENT A

