Alton Coal Development, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720
Phone (435) 867-5331 • Fax (435) 867-1192

C/025/0005
Received 7/13/15
Task ID #4951

July 11, 2015

Daron R. Haddock
Coal Program Manager
Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Subject: **Evaluation of Pipeline from Pit 10 to Sediment Pond 3, Pond 1 and facility waterline revisions, Alton Coal Development, LLC, Coal Hollow Mine, Kane County, Utah, C/025/0005, Task 4894**

Dear Mr. Haddock,

Alton Coal Development, LLC (ACD) is providing Appendix 5-13, "Evaluation of Pipeline from Pit 10 to Pond 3" to amend the MRP to allow a pumping system to remove water from Pit 10, the location of the underground facilities to Sediment Pond 3. As drawing and text edits are intertwined, these two submittals have been combined to reduce confusion. Hopefully this works better for your staff. Response to deficiencies are included also.

Changes to the MRP associated with this amendment have been uploaded to the DOGM's server for review. PDF versions of the drawing are not certified. Upon approval, 2 (two) clean hard copies of the certified drawings for insertion into the MRP will be submitted. Please do not hesitate to contact me if you have any questions 435-691-1551.

Sincerely

B. Kirk Nicholes
Environmental Specialist

R645-301-121.200. Clear and concise. The Drawing 5-28 is of Sediment Impoundment Pond 1. The narrative in the center of the document should only refer to design specifications regarding Sediment Impoundment Pond 1. Remove any narrative that is not directly related to Sediment Impoundment Pond 1.

Drawing 5-28 has been revised to remove the extra text, specifications for the ponds can be found within the MRP.

R645-301-733.130. In addition to updating Sediment Impoundment Pond 1 STORAGE VOLUME COMPUTATIONS, the application will need to update the narrative in Appendix 5-2 in the MRP supporting these computations.

Appendix 5-2 was reviewed with respect to Pond 1 Storage Volumes, no changes were warranted.

R645-301-526.220 requires a facilities description that states how the support facilities will be operated in accordance with a permit issued for the mine; this includes plans and drawing for each:

- The application does not include any changes to text within Chapter 5 section 526 where the Permittee should detail: the number and size of tanks at each location, what each tank will be used for in mine operations, length and purpose of and purpose of pipelines, and to what extent the various parts of the water plan will be reclaimed or left in place. The details say the pipelines to the underground and buried while site inspections show that the pipeline in on the surface. In the event any of the tanks or pipelines will remain in place there must be a validation to meet R645 rules.
- There is no discussion of the tanks pads that should be included as it is relevant to bond estimates at final reclamation. The Permittee should detail how each of the respective tanks is secured, i.e concrete pads either within Chapter 5 or on Drawing 5-8c. If tanks are mounted on mobile equipment it needs to be clarified as such within the text.

  R645-301-531, -532, -533 & -742.220 requires certified detailed design plans for siltation structures and impoundments that meet 10 yr, 24 hr design storm. The updated Pond 1 has different dimensions from the original Pond 1 but the storage volume computations remain unchanged. The storage volume computations need to be updated for the as-built Pond 1.

Section 526 of the MRP has been updated to reflect the current configuration of tanks and associated pipelines, also Drawings 5-3, 5-8c with the design of the portable water tanks utilized at the mine.

Computations for Pond 1 have been modified for the as-built Pond 1.

R645-301-521.161 and -301-121.200 requires maps of the proposed features that clearly show buildings, utility corridors, and facilities to be used. The current drawing 5-8C does not meet

the minimum requirements of the above rule as the drawing is not clear and concise and missing information:

- A call out of concrete pads or other means of stabilization/foundations for tanks

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The permittee will supply a corrected Drawing 5-8C that details the dimensions of the foundations for the respective tanks or add text to Chapter 5 including such details, clarify where the South and North Tank are located, and call out the number of tanks present at the facilities area.

Drawing 5-8C has been amended to show actual location of each tank, an accurate drawing of the tanks is included. The portable tanks have no concrete pads or footings as depicted. The texts for section 526 has been updated with descriptions of the tanks and there locations.

The application does not meet the minimum requirements of R645-301-830 as the Permittee did not supply updated reclamation cost for the additional line items updated within the application, such as the additional tank removal, concrete demolition, pipeline removal/backfill, and earthwork regrading for backfilling of Pond 1.

The minor bond cost for removal of one additional tank and removal of 1,409 feet of surface pipe will be included in the updated bond included with the new combined bond release application being submitted this week.

APPLICATION FOR COAL PERMIT PROCESSING

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

Permittee: Alton Coal Development, LLC
Mine: Coal Hollow Mine **Permit Number:** C/025/0005
Title: Evaluation of Pipeline from Pit 10 to Sediment Pond 3 and Pond 1/Facility update
Description, Include reason for application and timing required to implement:
[redacted]

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

☐ Yes ☒ No 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ ☐ increase ☐ decrease.
☐ Yes ☒ No 2. Is the application submitted as a result of a Division Order? DO# _____
☐ Yes ☒ No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
☐ Yes ☒ No 4. Does the application include operations in hydrologic basins other than as currently approved?
☐ Yes ☒ No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes ☒ No 6. Does the application require or include public notice publication?
☐ Yes ☒ No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
☐ Yes ☒ No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
☐ Yes ☒ No 9. Is the application submitted as a result of a Violation? NOV # _____
☐ Yes ☒ No 10. Is the application submitted as a result of other laws or regulations or policies?
Explain: _____
☐ Yes ☒ No 11. Does the application affect the surface landowner or change the post mining land use?
☐ Yes ☒ No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
☐ Yes ☒ No 13. Does the application require or include collection and reporting of any baseline information?
☐ Yes ☒ No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
☐ Yes ☒ No 15. Does the application require or include soil removal, storage or placement?
☐ Yes ☒ No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
☒ Yes ☐ No 17. Does the application require or include construction, modification, or removal of surface facilities?
☒ Yes ☐ No 18. Does the application require or include water monitoring, sediment or drainage control measures?
☒ Yes ☐ No 19. Does the application require or include certified designs, maps or calculation?
☐ Yes ☒ No 20. Does the application require or include subsidence control or monitoring?
☐ Yes ☒ No 21. Have reclamation costs for bonding been provided?
☐ Yes ☒ No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
☐ Yes ☒ No 23. Does the application affect permits issued by other agencies or permits issued to other entities?
☐ Yes ☒ No 24. Does the application include confidential information and is it clearly marked and separated in the plan?

Please attach three (3) review copies of the application. If the mine is on or adjacent to Forest Service land please submit four (4) copies, thank you. (These numbers include a copy for the Price Field Office)

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

B. Kirk Nicholes (Print Name) | Environmental Specialist (Position) | 7/10/15 (Date) | B. Kirk Nicholes (Signature (Right-click above choose certify then have notary sign below))

Subscribed and sworn to before me this 9 day of July, 2015

Notary Public: Marty Nicholes, state of Utah.

My commission Expires: 9-11-2017
Commission Number: 670359
Address: 1670 E Millstone Cir
City: Enoch State: UT Zip: 84721

Notary Public
MARTY NICHOLES
Commission #670359
My Commission Expires
Sept 11, 2017
State of Utah

For Office Use Only:	Assigned Tracking Number:	Received by Oil, Gas & Mining

Form DOGM- C1 (Revised December 10, 2007)

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

Permittee: Alton Coal Development, LLC
Mine: Coal Hollow Mine **Permit Number:** C/025/0005
Title: Evaluation of Pipeline from Pit 10 to Sediment Pond 3 and Pond 1 / Facilities update

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

			DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED
☐ Add	☒ Replace	☐ Remove	Chapter 5 pages 36, 37 and 72
☒ Add	☐ Replace	☐ Remove	Chapter 5 Appendix 5-13
☐ Add	☒ Replace	☐ Remove	Chapter 5, Drawings 5-3, 5-3A, 5-8C and 5-28
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
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Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.	Received by Oil, Gas & Mining

APPENDIX 5-13

EVALUATION OF PIPELINE

FROM

PIT 10 TO SEDIMENT POND 3

EVALUATION OF PIPELINE

FROM

PIT 10 TO SEDIMENT POND 3

ALTON COAL DEVELOPMENT, LLC

COAL HOLLOW MINE

By

Dan W. Guy

Registered Professional Engineer

State of Utah No. 154168

EVALUATION OF PIPELINE FROM PIT 10 TO SEDIMENT POND 3

General

It is proposed to install a 4" High Density Polyethylene (HDPE) drainage pipe from the sump in Pit 10 to Sediment Pond 3. The pipe will provide a means to pump collected runoff or seepage from Pit 10, as well as a means to safely discharge any excess water encountered in the underground mining.

Plan

The plan is to collect water in a sump with dimensions of approximately 20' in diameter by 12' deep. The sump pump is to be automatically activated as the sump fills, and to shut off when the water depth is at 6'. The water will be pumped into the 4" line, which will run up the western highwall of Pit 10 and then be buried from the haulroad to Pond 3, as shown on the attached Figure 1 – Plan View. The line is projected to be approximately 3250' in length and will discharge at the uppermost end of Pond 3, as shown.

The proposed rate of the pumped discharge is 100 gpm or 0.22 cfs. At this rate, the exit velocity of the pumped water is expected to be less than 5 fps and non-erosive; however, it is proposed to diffuse the pipe discharge over a 5' wide by 10' long apron of 9" D50 or larger rock to prevent any scouring.

Sediment Pond Sizing

As shown in Appendix 5-2, Sediment Pond 3 has a required volume of 6.72 ac. ft. to contain the runoff and sediment from a 100 yr. – 24 hr. precipitation event. The actual size of the pond is 12.96 ac. ft., leaving an excess capacity of 6.24 ac. ft. over the required volume. Although it is very unlikely, if the proposed sump pump were to discharge continuously for 24 hours at 100 gpm, that would amount to approximately 0.44 ac. ft. added to the pond. The large size of the pond would still allow for complete retention of the pumped water and design runoff from a 100 yr. – 24 hr. storm for far greater than 24 hours.

Settling / Discharge Quality

As indicated above, the pond is of adequate size to contain the maximum pumped volume and design storm runoff for more than 24 hours to provide adequate time for settling of sediments. In fact, it would provide for a much longer time (up to 14 days) if required, prior to reaching the spillway.

In the unlikely event that water would need to be pumped from the underground operations, this would be far cleaner than storm or surface water, and would require little, if any, retention time to meet discharge standards.

The pond is also equipped with a 6" decant pipe, which will allow the operator to retain water as long as necessary to maximize settling, and then discharge under controlled conditions. Any discharges from the pond will be in accordance with the approved UPDES Discharge Permit, and sampled as required.

Conclusion

The existing Sediment Pond 3 is adequately sized to provide complete retention of the pumped water and the design 100 yr. – 24 hr. storm event for greater than 24 hours, and as much as 340 hours (14+ days) to allow for settling of sediments. In addition, the pond can be drained down as needed under controlled conditions with the approved decant pipe system. All discharges would be in accordance with the approved UPDES Discharge Permit and sampled as required.

CULVERT 5 - 12"
Pond 1B
24 INCH DROP
PIPE SPILLWAY
Straw Bale
(Sediment Control)
COUNTY ROAD 136
CLOSURE POINT
24 INCH CULVERT
OUTLET 6897'
24 INCH CULVERT
INLET 6901'
Air Monitor Site
1/16TH CORNER
19 19
1/16TH CORNER
19
1/16TH CORNER
19
96" Culvert 9
STORAGE CONTAINERS
2A
Berm
Laydown
Yard
Pond 2
24" Culvert 11
24' Culvert 16
Primary Haulroad
Robinson Creek
to be Reconstructed
after mining
Robinson Creek
Temporary Diversion
DIVERSION DITCH 4
(Configuration will change
as mining progresses)
DIVERSION DITCH 4
QUARTER CORNER
19-30
4" HDPE
PIPE BURIED
DITCH TO BE
PLACED IN FILL.
Pond 3
5' x 10'
9" D50
APRON
EXCESS SPOIL
SECTION CORNER
19-20-29-30
FAN
SUMP
PUMP
COAL
STOCKPILE
STACKER
JIG OFFICE
TRANSFORMER
SUB STATION
GENERATOR
BATH HOUSE
WATER TANK

Alton Coal Development
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UTAH REGISTERED PROFESSIONAL ENGINEER
#154168
DAN W. GUY

FACILITIES & STRUCTURES

Pipline from
Pit 10 to Pond 3

COAL HOLLOW
PROJECT
ALTON, UTAH

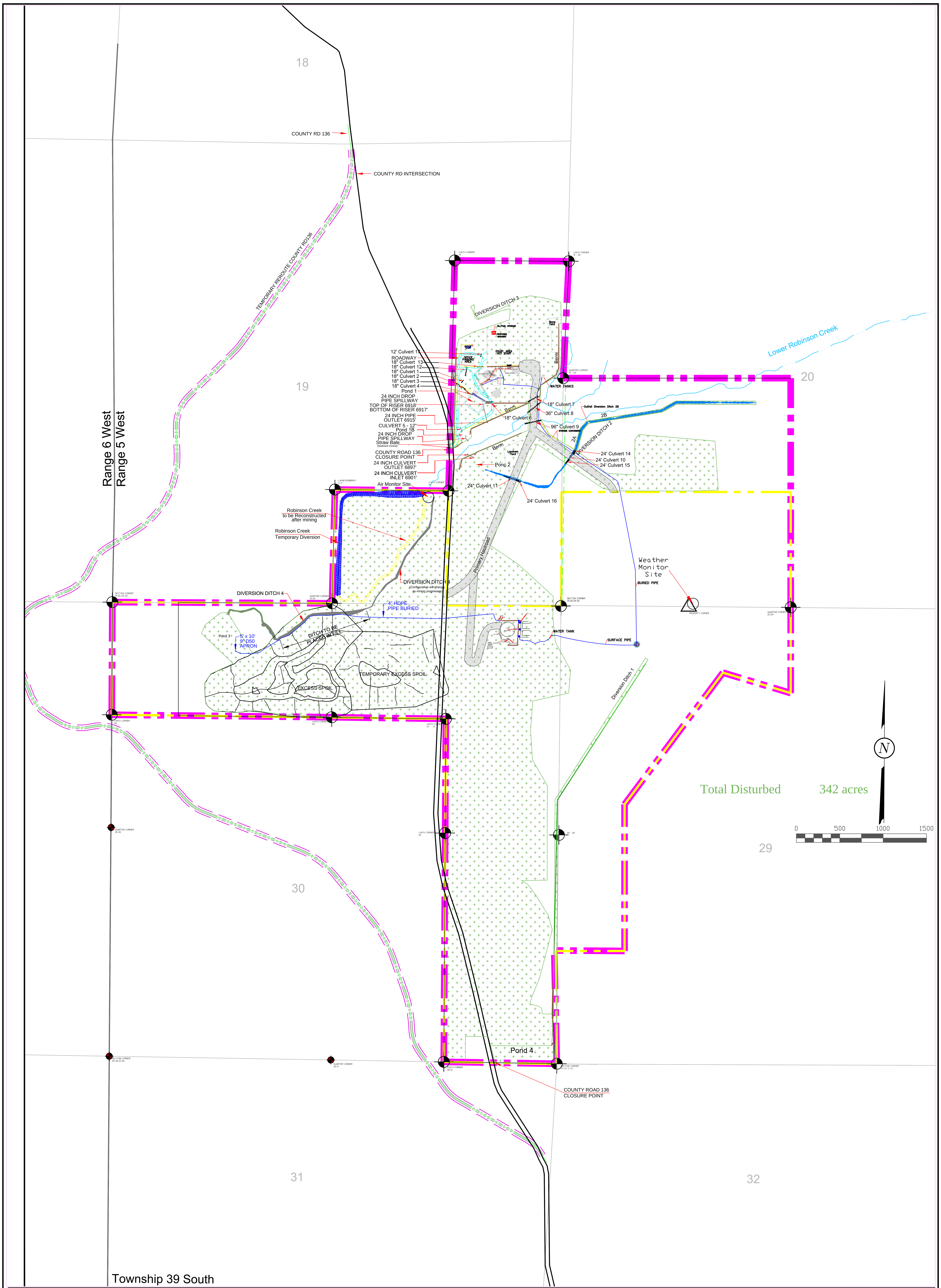
FIGURE 1

REVISIONS

DATE:	BY:

DRAWN BY: K. Nicholes
CHECKED BY: DWG
DRAWING: Figure 1
DATE: 11/10/08
SCALE: 1" = 150'
JOB NUMBER:
SHEET

LEGEND:
PERMIT BOUNDARY
PRIVATE COAL OWNERSHIP
COAL RECOVERY LINE
FOUND SECTION CORNER
FOUND PROPERTY CORNER
PIPE LINE


18
19
20
29
30
31
32
Range 6 West
Range 5 West
Township 39 South
COUNTY RD 136
COUNTY RD INTERSECTION
TEMPORARY REROUTE COUNTY RD136
DIVERSION DITCH 3
Lower Robinson Creek
12' Culvert 17
ROADWAY
18" Culvert 13
18" Culvert 12
18" Culvert 1
18" Culvert 2
18" Culvert 3
18" Culvert 4
Pond 1
24 INCH DROP
PIPE SPILLWAY
TOP OF RISER 6918'
BOTTOM OF RISER 6917'
24 INCH PIPE
OUTLET 6915'
CULVERT 5 - 12"
Pond 1B
24 INCH DROP
PIPE SPILLWAY
Straw Bale
(Sediment Control)
COUNTY ROAD 136
CLOSURE POINT
24 INCH CULVERT
OUTLET 6897'
24 INCH CULVERT
INLET 6901'
Air Monitor Site
Berm
WATER TANKS
18" Culvert 7
36" Culvert 8
18" Culvert 6
96" Culvert 9
Outfall Diversion Ditch 2B
2B
2A
DIVERSION DITCH 2
24' Culvert 14
24' Culvert 10
24' Culvert 15
Laydown Yard
Pond 2
24" Culvert 11
24' Culvert 16
Primary Haulroad
Robinson Creek
to be Reconstructed
after mining
Robinson Creek
Temporary Diversion
DIVERSION DITCH 4
(Configuration will change as mining progresses)
DIVERSION DITCH 4
4" HDPE
PIPE BURIED
Pond 3
5' x 10'
9" D50
APRON
DITCH TO BE
PLACED IN FILL
TEMPORARY EXCESS SPOIL
EXCESS SPOIL
Weather
Monitor
Site
BURIED PIPE
WATER TANK
SURFACE PIPE
Diversion Ditch 1
Total Disturbed
342 acres
N
0
500
1000
1500
Pond 4
COUNTY ROAD 136
CLOSURE POINT

LEGEND:

PERMIT BOUNDARY
PRIVATE COAL OWNERSHIP
COAL RECOVERY LINE
SECTION LINE
FOUND SECTION CORNER
FOUND PROPERTY CORNER
DIVERSION DITCHES
PROPOSED SEDIMENT IMPOUNDS
BERM
YEAR 1 DISTURBANCE
YEAR 2 DISTURBANCE
YEAR 3 DISTURBANCE
CENTERLINE
WATER LINE
WATER TANK / WELL

DRAWN BY: C. McCOURT, G. Grossman	CHECKED BY: CRM/WES
DRAWING: 5-3	DATE: 11/10/08
	SCALE: 1" = 500'
JOB NUMBER: 1400	SHEET

REVISIONS

DATE:	BY:
6/13/11	KN/JKJR
7/11/15	KN

FACILITIES & STRUCTURES

LAYOUT

COAL HOLLOW PROJECT
ALTON, UTAH

DRAWING: 5-3

UTAH REGISTERED PROFESSIONAL ENGINEER #154168 DAN W. GUY

Alton Coal Development
Coal Hollow Project
463 North 100 West, Suite 1
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Phone (435) 867-5331
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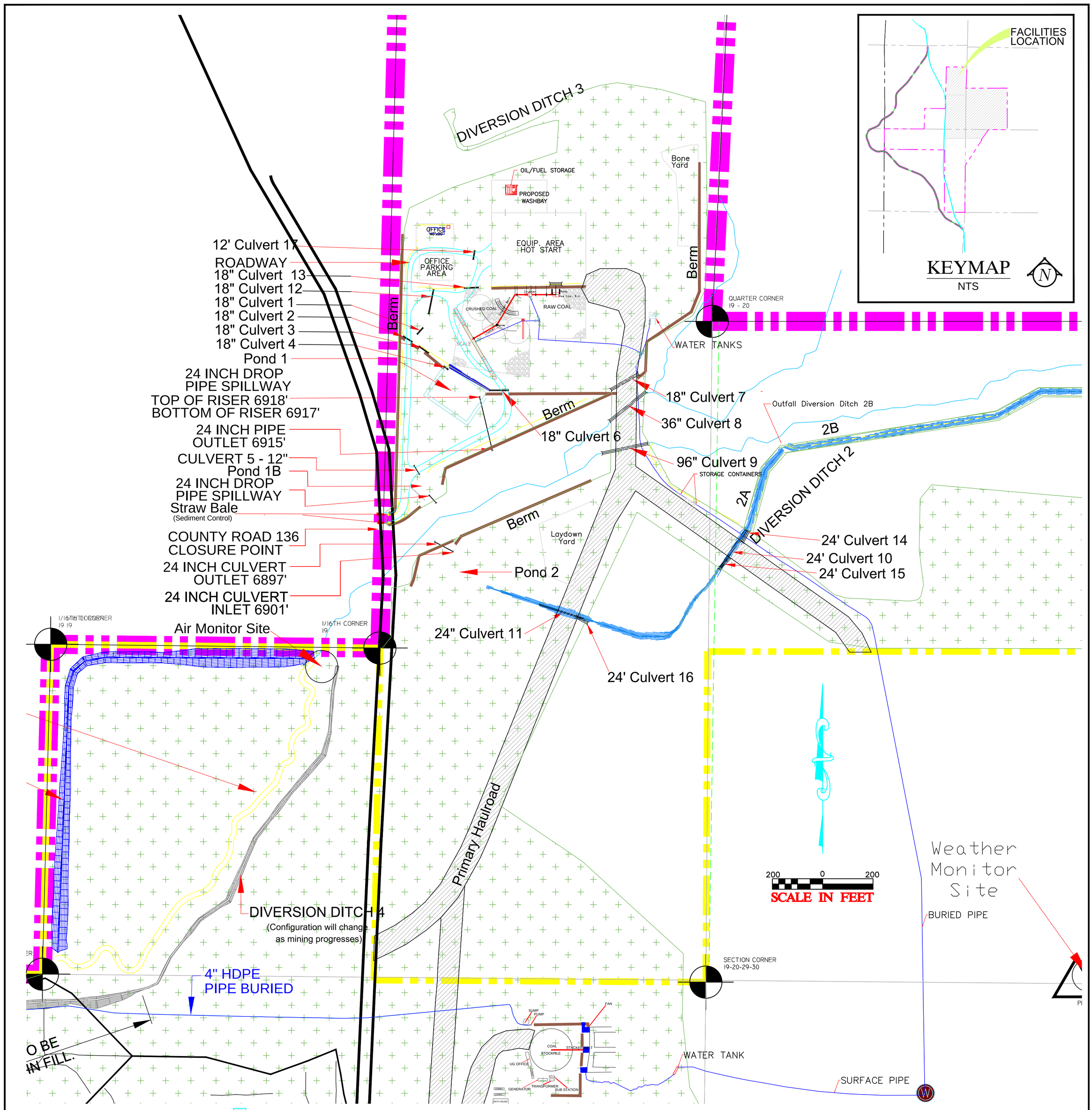
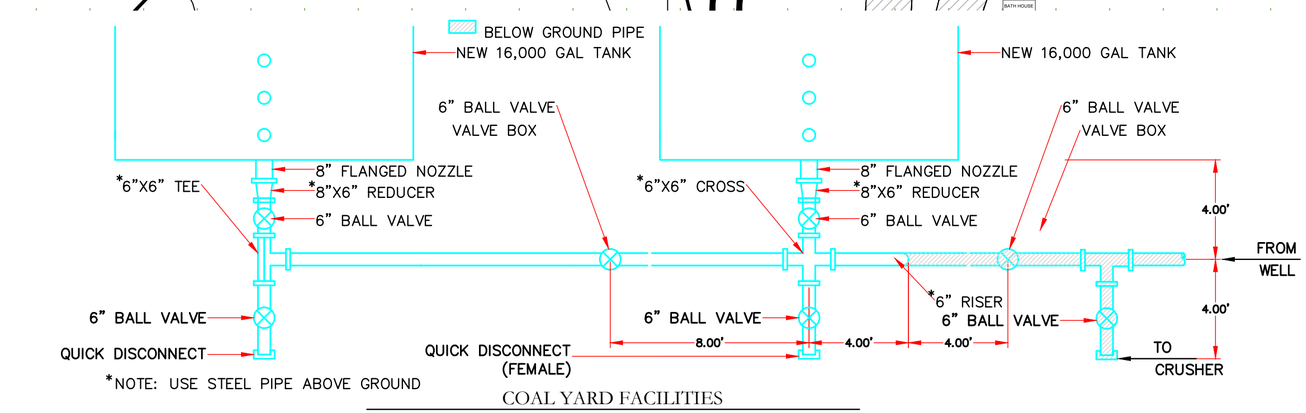
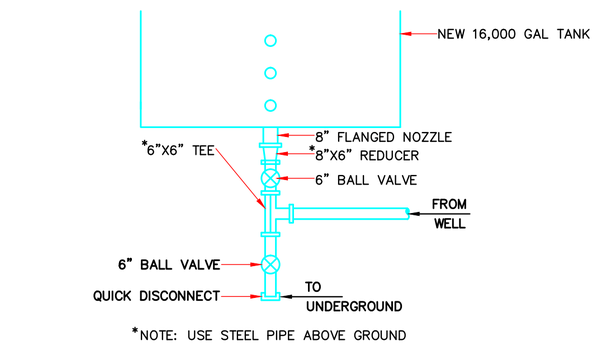
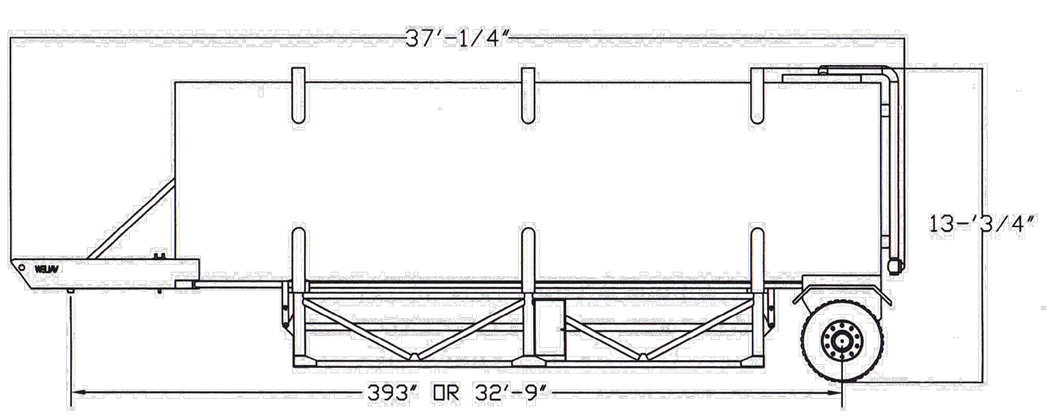




COAL YARD FACILITIES



PIT 10 UG TANK

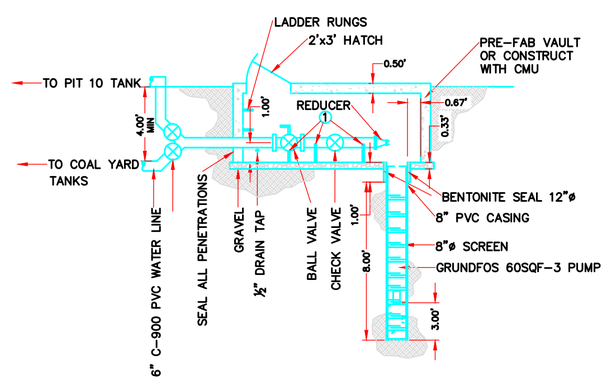


16,000 GALLON STEEL TANK DETAIL

NOT TO SCALE

SPECIFICATIONS

1. *GRUNDFOS 60SQF-3 SUBMERSIBLE PUMP 50 GPM*
2. *10-2 W/GRN. SUBMERSIBLE PUMP CABLE*
3. *CABLE CLIPS*
4. *STRAINING WIRE*
5. *WIRE CLAMP*
6. *TRACKING MOUNT: UTRF-168HD TRACKER (12 MODULES)*
10. *DIESEL- OR PETROL-DRIVEN PORTABLE GENERATOR*
13. *I/O GENERATOR CONTROLLER*



GROUND WATER PUMP DETAIL

LEGEND:

- PROJECT AREA
- PRIVATE COAL OWNERSHIP
- SECTION LINE
- W — 6" PVC C-900 WATER LINE
- 4050 / 4049 — EXIST. CONTOURS
- 2014-15 DISTURBANCE EXTENTS
- GROUNDWATER PUMP SYSTEM (SEE DETAIL ABOVE). 5 GPM WITH 60 FT OF HEAD.
- 12.5'(DIA) X 17.5'(L) 16,000 GAL WATER TANK MOUNTED ON SKIDS X 2 (SEE DETAIL ABOVE).
- WATER LINE VALVE

DRAWN BY: G. GROSSMAN	CHECKED BY: CRM/WES
DRAWING: 5-8C	DATE: 11/10/08
	SCALE: 1" = 200'
JOB NUMBER: 1400	SHEET

REVISIONS

DATE:	BY:
5/8/2015	ARC
7/11/2015	KN

FACILITIES & STRUCTURES

WATER PLAN

COAL HOLLOW PROJECT
ALTON, UTAH

DRAWING: 5-8C

UTAH REGISTERED #154168 DAN W. GUY PROFESSIONAL ENGINEER

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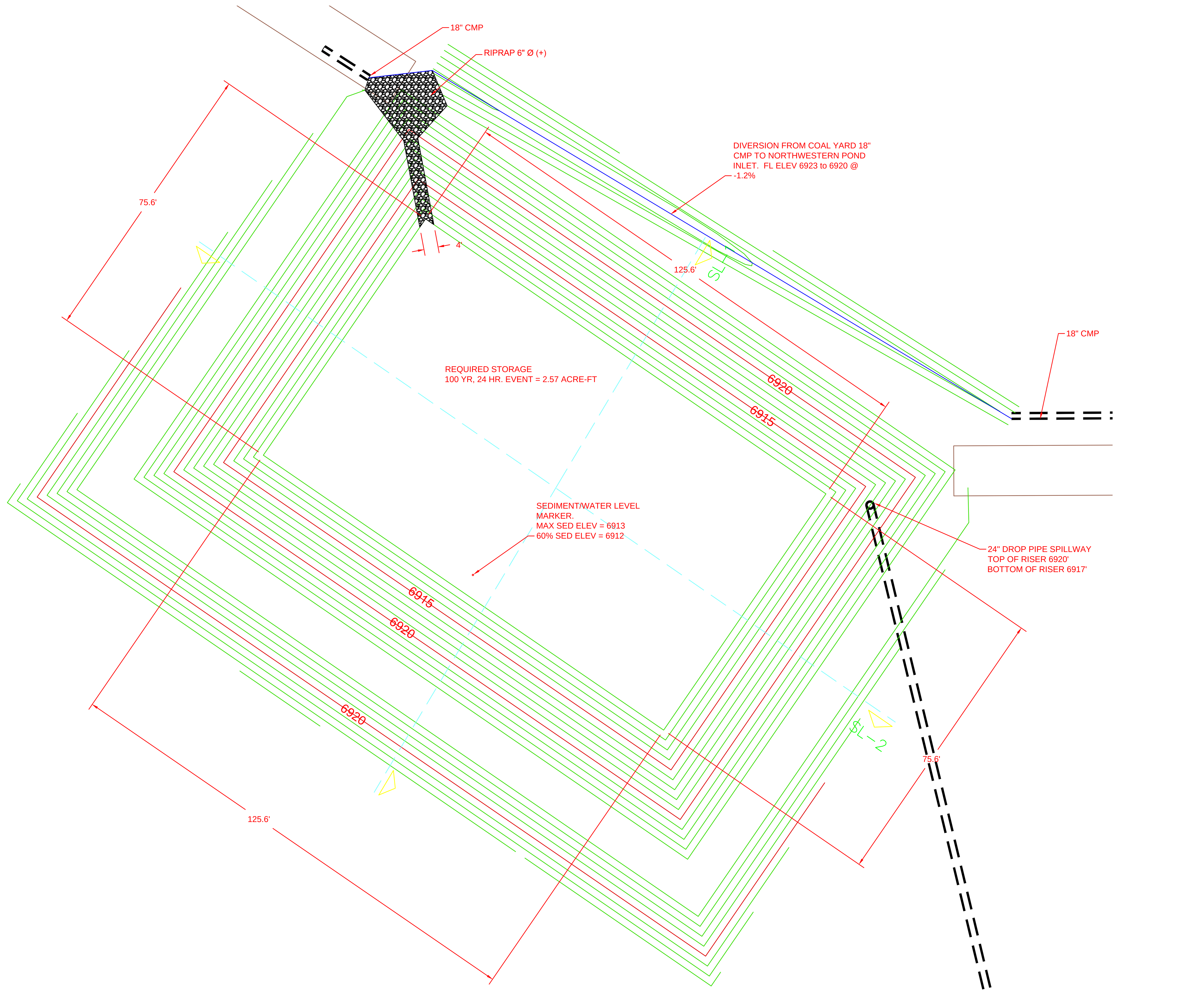
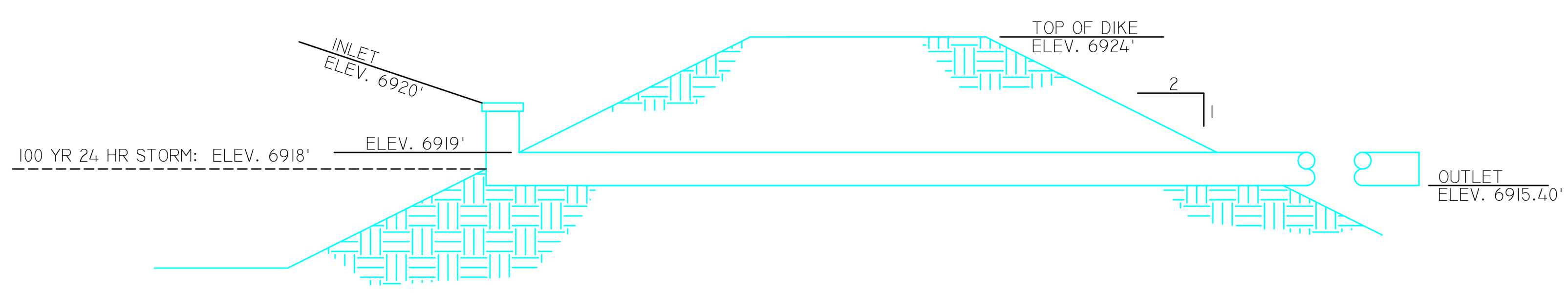


POND #1 – PLAN

1 / C9.0

SCALE: 1" = 20'

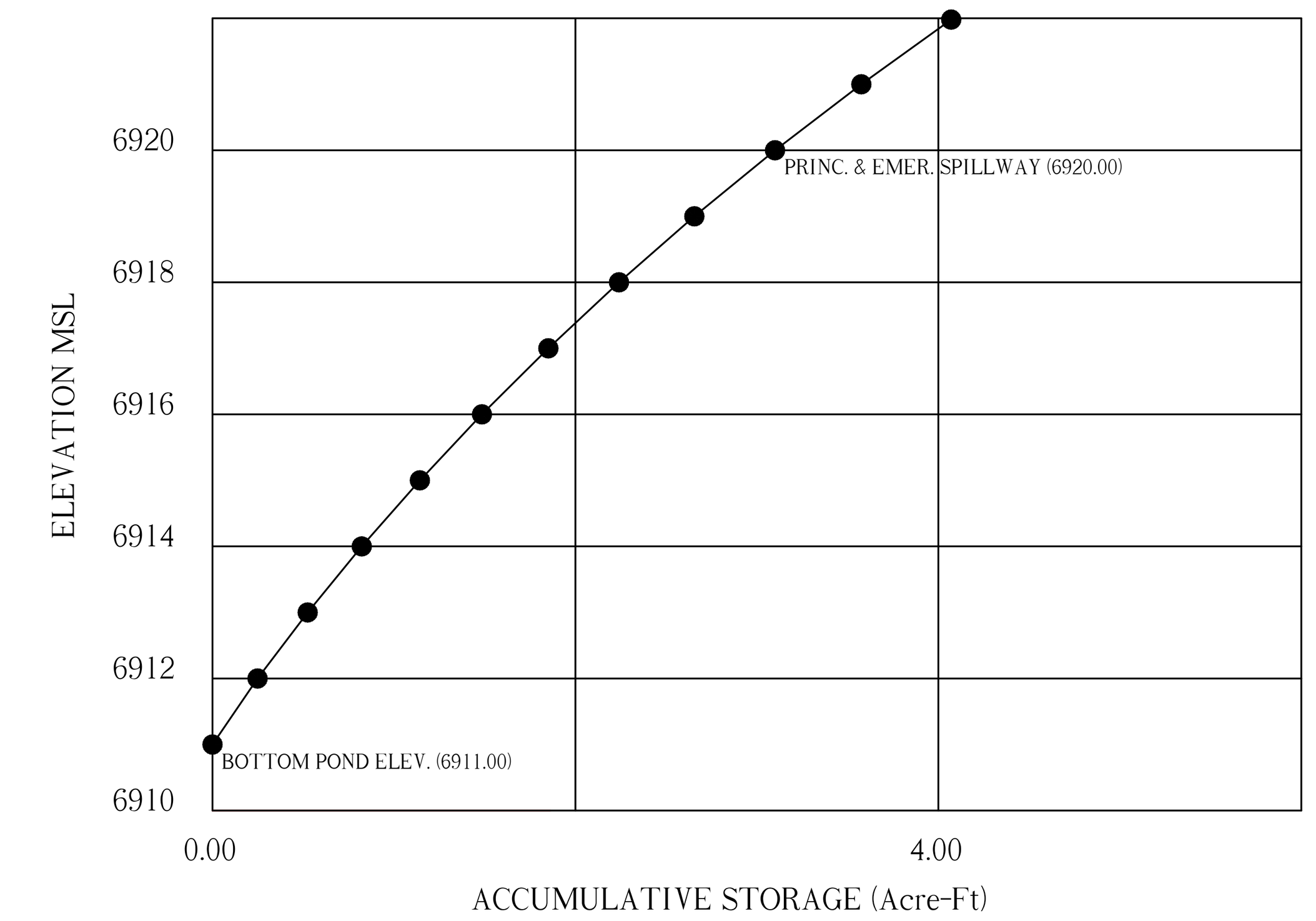


TYPICAL CROSS SECTION

Not to Scale

STAGE STORAGE CURVE

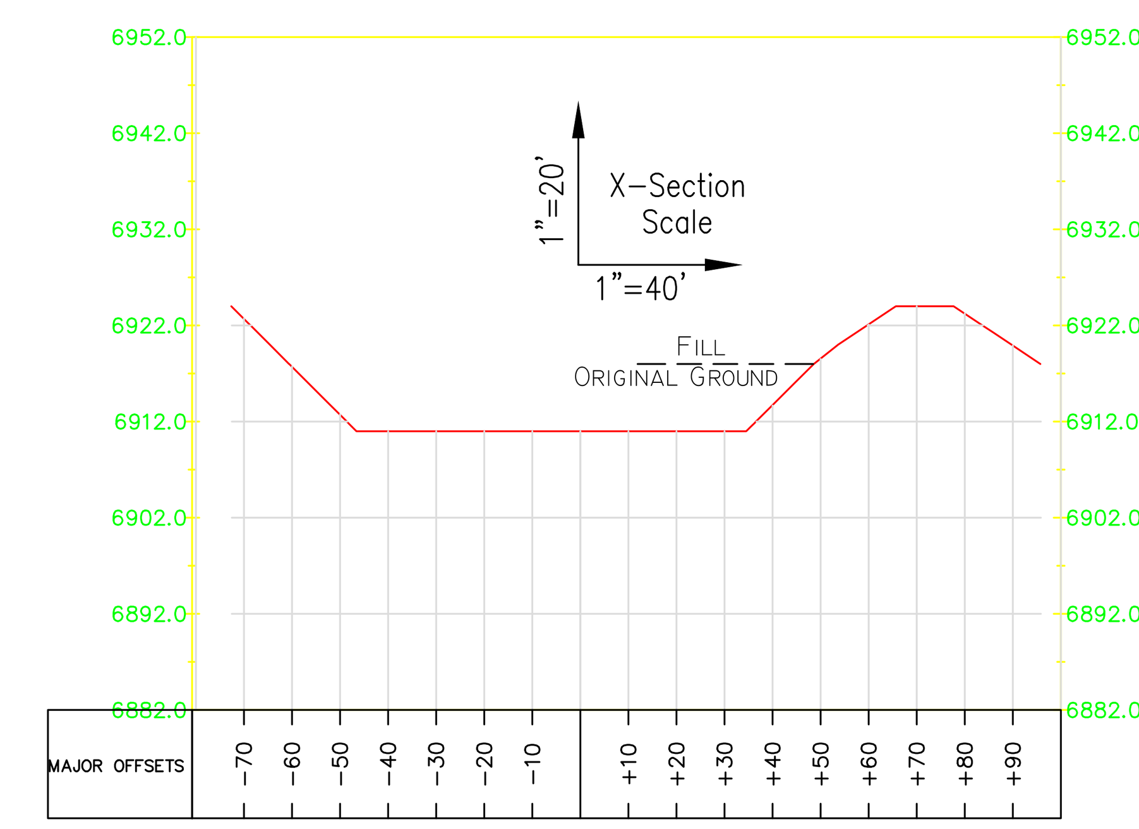
Sediment Control Structure No. 1



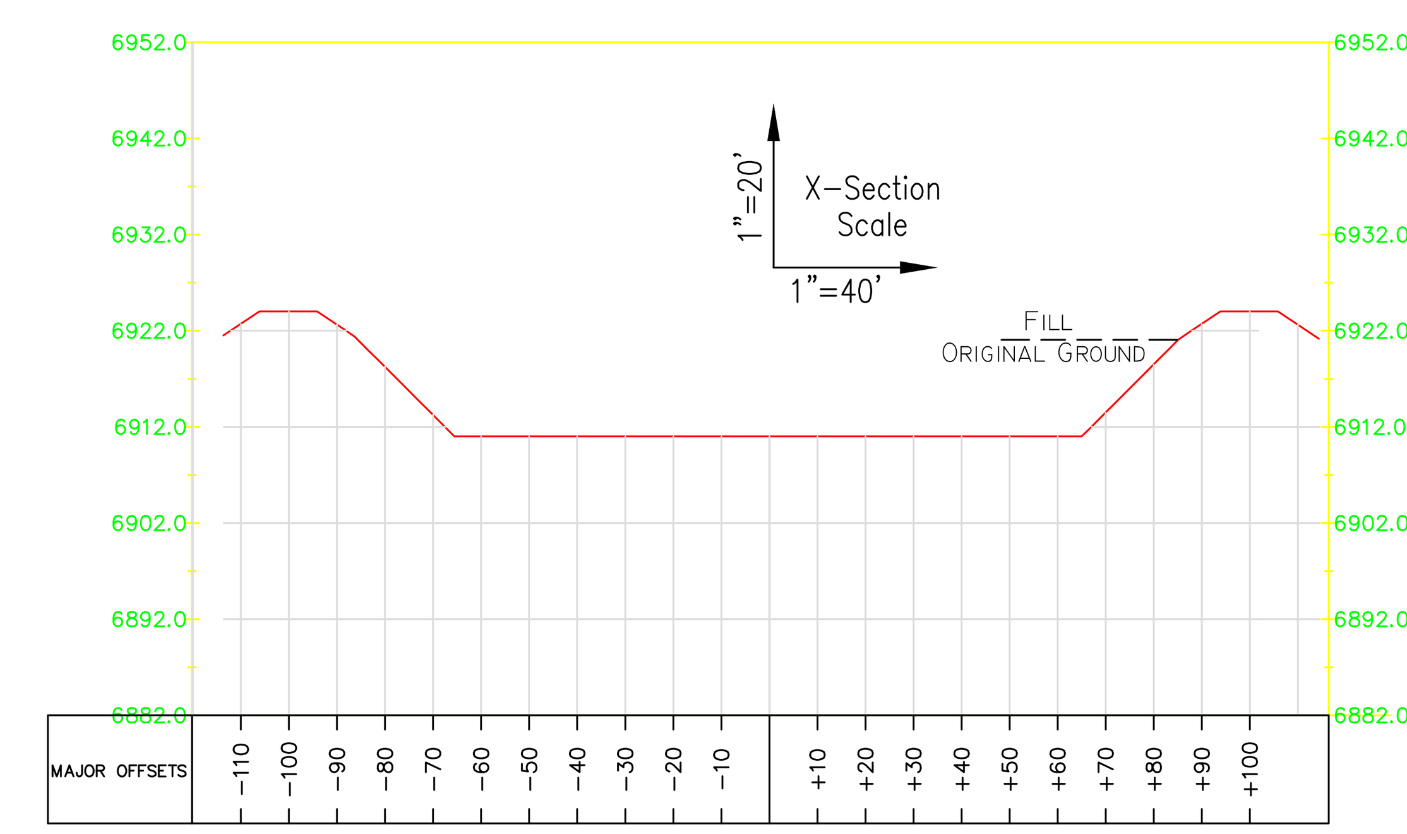
STORAGE VOLUME COMPUTATIONS

Sediment Control Structure No. 1

ELEV. (ft)	WIDTH (ft)	LENGTH (ft)	AREA (ac)	AVG. AREA (ac)	INTERVAL (ft)	STORAGE (ac-ft)	ACC. STORAGE (ac-ft)	STAGE INTERVAL (ft)
6911.00	NA	NA	0.2503	0.2604	1.00	0.2604	0.2604	1.00
6912.00	NA	NA	0.2705	0.2810	1.00	0.2810	0.5413	2.00
6913.00	NA	NA	0.2914	0.3022	1.00	0.3022	0.8436	3.00
6914.00	NA	NA	0.3131	0.3243	1.00	0.3243	1.1679	4.00
6915.00	NA	NA	0.3356	0.3472	1.00	0.3472	1.5151	5.00
6916.00	NA	NA	0.3587	0.3707	1.00	0.3707	1.8857	6.00
6917.00	NA	NA	0.3826	0.3949	1.00	0.3949	2.2807	7.00
6918.00	NA	NA	0.4072	0.4199	1.00	0.4199	2.7006	8.00
6919.00	NA	NA	0.4326	0.4457	1.00	0.4457	3.1463	9.00
6920.00	NA	NA	0.4587	0.4721	1.00	0.4721	3.6184	10.00
6921.00	NA	NA	0.4855	0.4993	0.98	0.4993	4.1177	11.00
6922.00	NA	NA	0.5131					
6924.00								



SL-1



SL-2

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REGISTERED PROFESSIONAL ENGINEER #154168 DAN W. GUY STATE OF UTAH

SEDIMENT IMPOUNDMENT POND 1 DETAILS

COAL HOLLOW PROJECT
ALTON, UTAH

DRAWING: 5-28

REVISIONS

DATE:	BY:
4/19/2011	KRB
5/7/2015	ARC
7/11/2015	KN

DRAWN BY: KRB

CHECKED BY: JL

DRAWING: 5-28

DATE: 11/08/2010

SCALE: AS NOTED

JOB NUMBER: 594-01-01