

(d) Include letters of commitment from outside parties ensuring the provision of any necessary public facilities and any state and local governmental agencies which have to initiate, implement, approve or authorize the proposed land use.

(e) Enclose design plans for the proposed post-mining land use, if applicable.

B. Grading and Contouring

(1) Enclose detailed plans with appropriate cross sections or maps.

The reclamation will return the site contours and grading to as close to original grade and contour as possible. Original and estimated reclaimed grades in each phase are shown on cross-section Figures IV.B.1-1, IV.B.1-2 and IV.B.1-3 included in Appendix IV.B.1.

(2) Complete the following timetable.

<u>Increment (if applicable)</u>	<u># months after operation begins</u>	<u>% of increment which will be graded and contoured</u>
1	3 months	0 %
	6 months	0 %
	9 months	25 %
	12 months	50 %
	15 months	75 %
	18 months	100 %

<u>Increment (if applicable)</u>	<u># months after operation begins</u>	<u>% of increment which will be graded and contoured</u>
2	3 months	0 %
	6 months	25 %
	9 months	50 %
	12 months	75 %
	15 months	100 %

<u>Increment (if applicable)</u>	<u># months after operation begins</u>	<u>% of increment which will be graded and contoured</u>
3	3 months	0 %
	6 months	25 %
	9 months	50 %
	12 months	75 %
	15 months	100 %

NOTE: Grading and contouring overburden of each mining increment shall follow coal removal by no more than 180 days.

(3) On appropriate map(s), show representative values for the following:

See **Figures IV.B.1-1, IV.B.1-2, and IV.B.1-3**

(a) Percent of slope before mining;

<u>Increment</u>	<u>Average Slope, %</u>
1	2.9
2	1.7
3	2.3

(b) Proposed post-mining slope including slope of the highwall(s) in percent.

<u>Increment</u>	<u>Average Slope, %</u>
1	3.0
2	2.3
3	3.0

(4) Complete the following:

(a) Is the mining operation to be conducted on a pre-existing (prior to August 3, 1977) highwall?

() Yes (**XX**) No

(b) Is the operation of such limited slope as to not generate enough material to completely backfill the re-affected or enlarged highwall?

() Yes (**XX**) No

If Yes, provide analysis to show maximum extent of backfilling possible.

C. Revegetation

(1) Outline procedures for soil testing required to determine type and amount of soil amendments to be applied and to evaluate results of topsoil handling and replacement.

After placement of overburden materials into the excavations is completed, the areas will be graded and contoured to approximate pre-mine conditions. Topsoil materials from stockpiles will be placed and graded. Samples of the

exposed topsoil materials will be obtained for analyses to determine what additives, if any, will be required to promote and maintain vegetative growth. Testing may include pH, total sulfur, phosphorus, potassium, magnesium, calcium, alkalinity and nitrate-nitrogen. Recommendations for additives may include lime, nitrogen, phosphorus and potassium, as well as other additives.

- (2) Are selected overburden materials to be used as a supplement or substitute for topsoil?
() Yes (**XX**) No

If yes, provide results of analysis, trials, and tests required.

- (3) Are commercial or introduced species to be used?
() Yes (**XX**) No

If yes, give a narrative with supporting references which show that the species meet the requirements.

- (4) Is the area to be reclaimed for fish and wildlife habitat?
() Yes (**XX**) No

If yes, list the species of plants to be used with a brief description of how they meet the criteria.

- (5) Complete the following schedules for each increment or sub-area of the permit area.

VEGETATION SCHEDULE

Increments: 1, 2, and 3

Temporary Vegetation

<u>Species</u>	<u>Planting Rate</u>	<u>Planting Methods</u>	<u>Planting Dates</u>	<u>Areas to be Planted</u>
Rye Grass	10 lbs/acre	Broadcast	Fall / Winter	All disturbed areas
Browntop Millet	10 lbs/acre	Broadcast	Spring / Summer	All disturbed areas

Permanent Vegetation

<u>Species</u>	<u>Planting Rate</u>	<u>Planting Methods</u>	<u>Planting Dates</u>	<u>Areas to be Planted</u>
Common Bermuda Grass	10 lbs/acre	Broadcast	Spring / Summer	All disturbed areas
Kobe Lespedeza	30 lbs/acre	Broadcast	Spring / Summer	All disturbed areas
Fescue	50 lbs/acre	Broadcast	Spring / Fall	All disturbed areas
Serala Sericea	35 lbs/acre	Broadcast	Spring / Fall	All disturbed areas
Crimson Clover	15 lbs/acre	Broadcast	Fall	All disturbed areas
Yuche Arrow Leaf Clover	10 lbs/acre	Broadcast	Fall	All disturbed areas

- (6) Describe, in detail, proposed husbandry practices to be used.

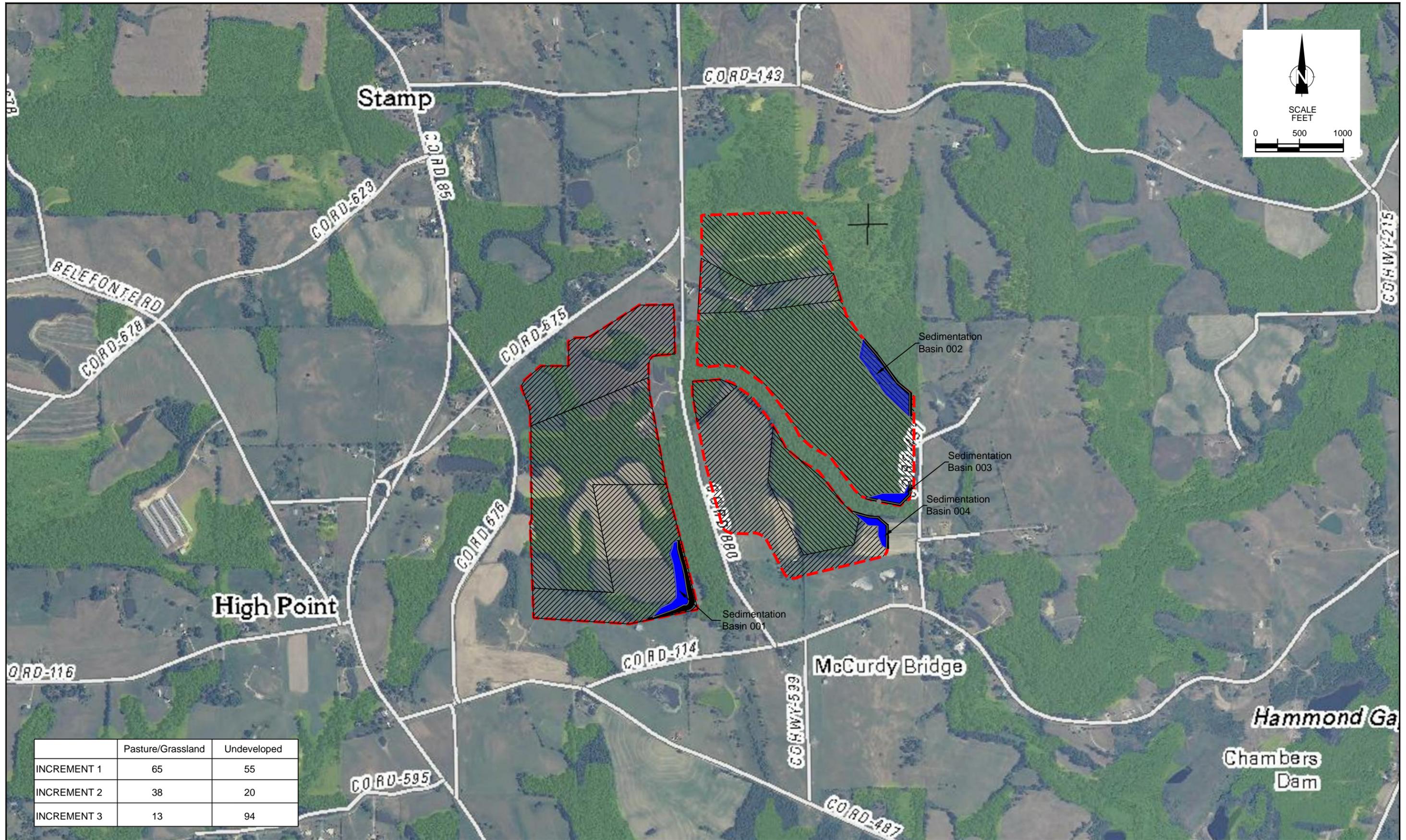
Typical husbandry practices to improve the development of vegetative cover during reclamation activities will include:

- **The addition of proper nutrients to promote vegetative growth.**
- **The use of hay mulch along with the seeding and fertilizing to maximize the potential germination of seeds, retention of moisture and minimization of erosion. From 1.5 to 3 tons of hay per acre will be spread as mulch over recently seeded areas.**
- **The use of spot seeding areas after initial seeding to increase cover in those areas with sparse vegetative cover.**

- (7) Describe, in detail, the measures and sampling methods to be used to determine and demonstrate the productive capacity of reconstructed prime farmland.

The success of revegetation efforts will be determined using methods in accordance with the ASMC Technical Manual #1, “Approved Statistical Analysis and Sampling Techniques for Determining Revegetation Success on Surface Mined Lands in Alabama”, November 1990.

T:\PROJECT FILES\Ridgeholm\DeKalb County Project\Maps\CAD\MPDES MAP 2013122013 PHASE MAP.dwg, POST_MINE_06/2014 11:07:45 AM



	Pasture/Grassland	Undeveloped
INCREMENT 1	65	55
INCREMENT 2	38	20
INCREMENT 3	13	94

Legend:

- Proposed Areas to be Disturbed by Mining
- / / / / / Pasture/Grassland
- \ \ \ \ \ Undeveloped
- █ Sedimentation Basins

Ridgeholm Energy Partners, LLC
 100 Oxmoore Road, Suite 110
 Birmingham, Alabama 35209

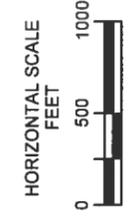
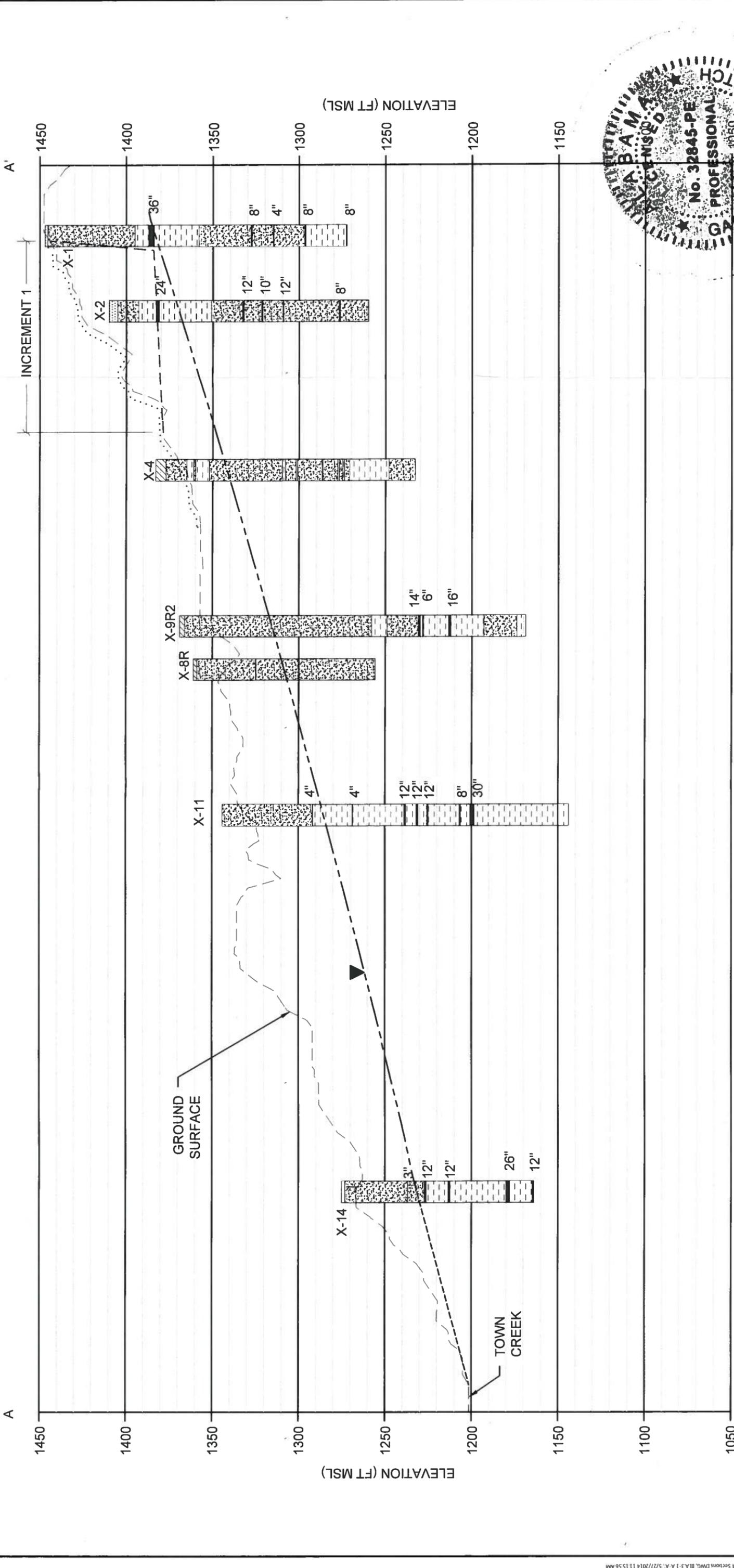
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POST MINING LAND USE MAP
 John Poe Mine
 DeKalb County, Alabama

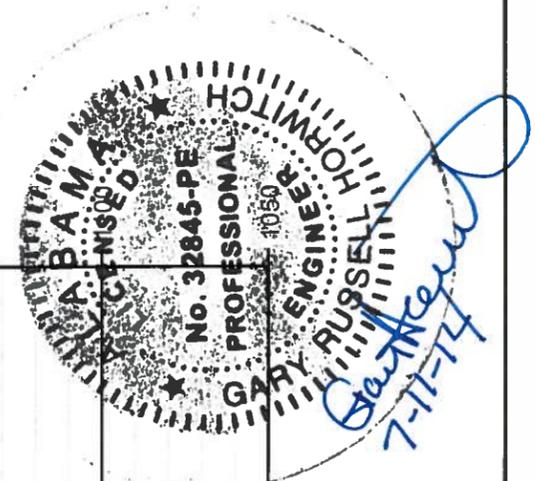
DRAWN: JMT CHECKED: RAD DATE: 06/14 FIGURE: IV.A.1-1

APPENDIX IV.B.1



- LEGEND**
- Sandstone
 - Shale
 - Sand
 - Clay
 - 12" Coal and Thickness
 - Static Water Level 04-20-13
 - Extrapolated Water Level
 - Proposed Excavation
 - Proposed Surface Reclamation

Note: Borings and Phase Boundaries are Projected to Cross Section line.

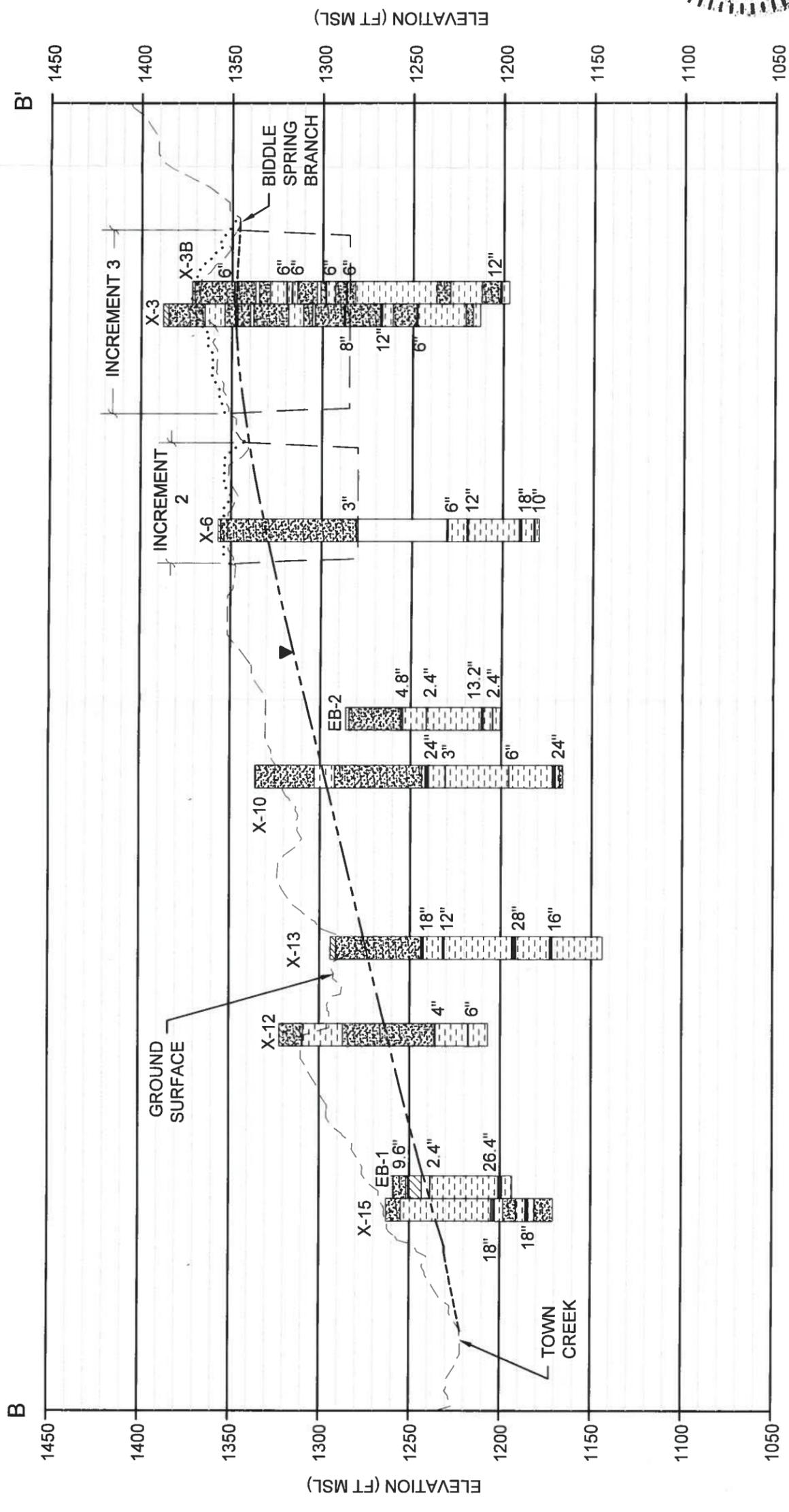
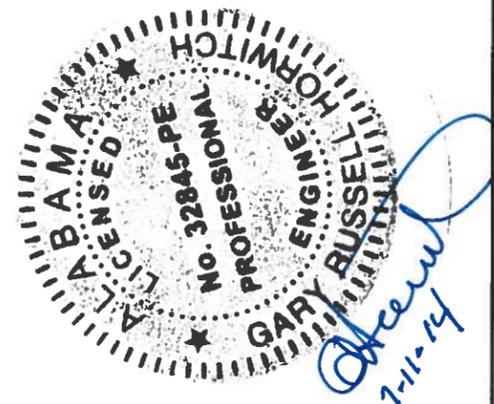


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 BIRMINGHAM, ALABAMA 35209
 PROJ. NO: 02.20120195.00

CROSS SECTION A-A
 JOHN POE MINE
 DEKALB COUNTY, ALABAMA

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- LEGEND**
- Sandstone
 - Shale
 - Sand
 - Clay
 - 12" Coal and Thickness
 - Static Water Level 04-20-13
 - Extrapolated Water Level
 - Proposed Excavation
 - Proposed Surface Reclamation

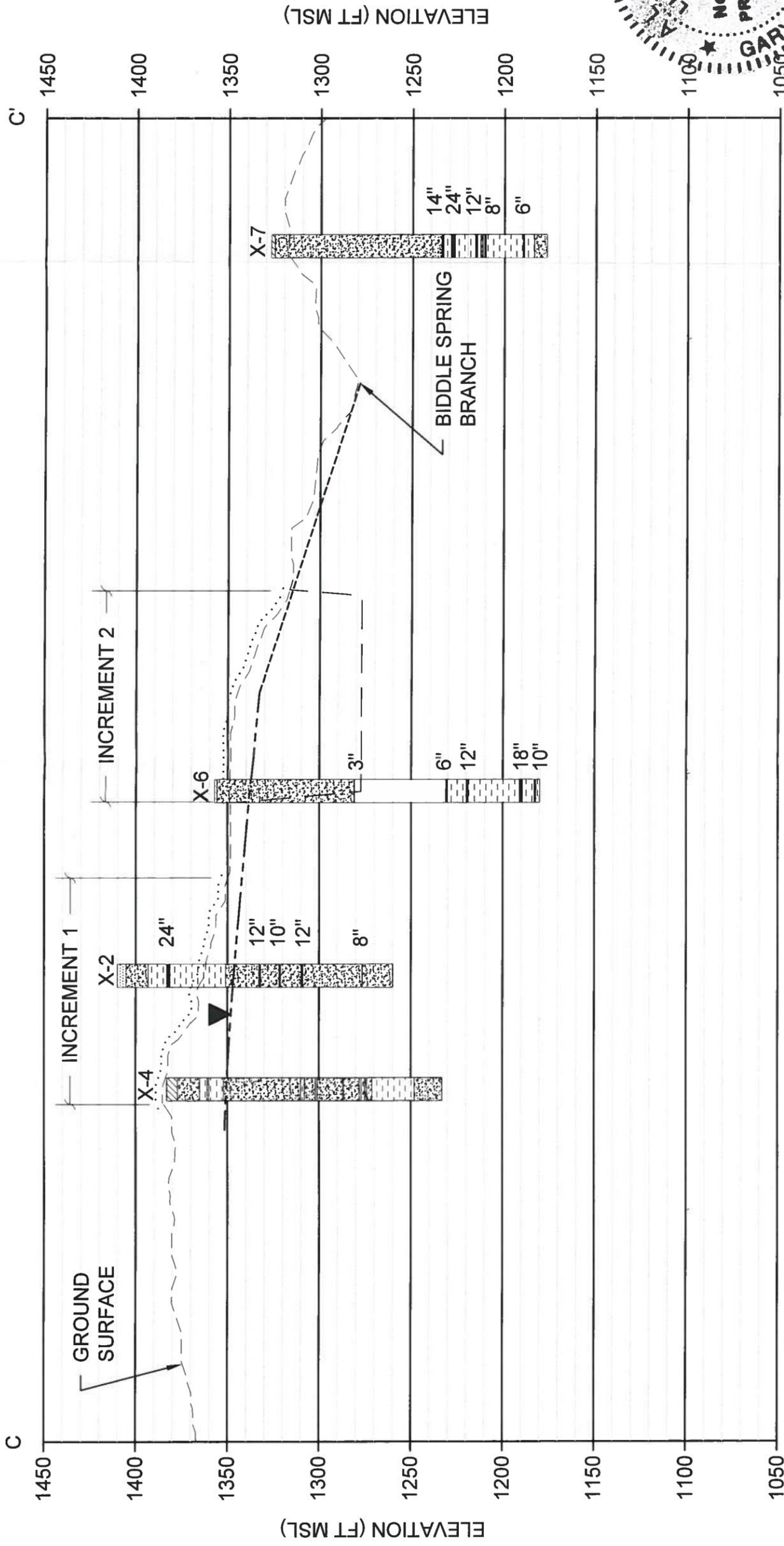
Note: Borings and Phase Boundaries are Projected to Cross Section line.

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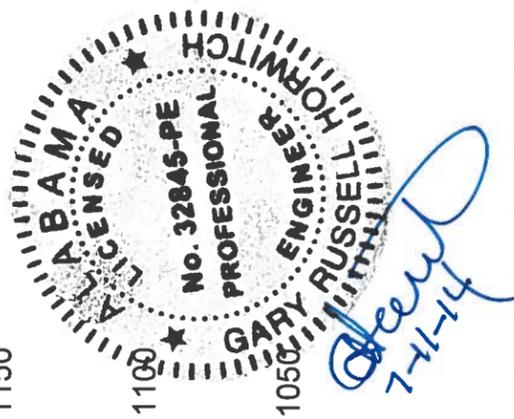
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CROSS SECTION B-B'
 JOHN POE MINE
 DEKALB COUNTY, ALABAMA



- LEGEND**
- Sandstone
 - Shale
 - Sand
 - Clay
 - 12" Coal and Thickness
 - Static Water Level 04-20-13
 - Extrapolated Water Level
 - Proposed Excavation
 - Proposed Surface Reclamation



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CROSS SECTION C-C
 JOHN POE MINE
 DEKALB COUNTY, ALABAMA

DATE: 01/12/14
 RAD
 CHECKED
 LDG
 DRAWN

FIGURE: IV.B.1-3

Note: Borings and Phase Boundaries are Projected to Cross Section line.