



July 15, 2026

Stephen Miles, P.E.
Alabama Surface Mining Commission
P. O. Box 2390
Jasper, AL 35502-2390

RE: **Crimson Oak Grove Resources, LLC**
Oak Grove Mine, P-3232, R-62
Subsidence Control Plan

Dear Mr. Miles:

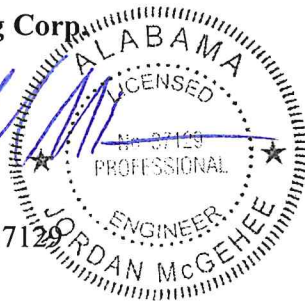
I, Jordan McGehee, a qualified registered professional engineer, hereby certify that the information, cross-sections, data, maps, etc., contained in the Subsidence Control Plan are true and accurate to the best of my knowledge and belief. I also certify that this plan is in accordance with current, prudent mining engineering practices, and meets or exceeds the applicable parts of 880-X-8I-.10 and 880-X-10D-.58.

If you have any questions or need additional information, please do not hesitate to contact our office.

Sincerely,

McGehee Engineering Corp


Jordan McGehee, P.E.
Alabama License No. 37129

A circular professional engineer seal for the State of Alabama. The outer ring contains the text "ALABAMA" at the top and "JORDAN MCGEHEE" at the bottom. Inside the ring, the word "ENGINEER" is at the bottom, "PROFESSIONAL" is in the center, and "No. 37129" is at the top. Two stars flank the central text.

CRIMSON OAK GROVE RESOURCES, LLC

OAK GROVE MINE, P-3232, R-62

ALABAMA SURFACE MINING COMMISSION

SUBSIDENCE CONTROL PLAN UPDATE

July 15, 2026

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TABLE OF CONTENTS

TOPIC	PAGE:
1.0 Introduction	5
2.0 COGR's Course of Action	5
3.0 Description of Surface	6
3.1 Panels 54 thru 58	6
4.0 Geology.....	7
5.0 Planned Mining.....	7
5.1 Mining Plan.....	7
5.2 Mining Schedule	8
6.0 Subsidence	8
6.1 Planned Subsidence.....	8
6.2 Non Commercial & Residential Subsidence Impacts.....	8
6.3 Commercial Facilities.....	9
6.4 Public Roadways & Related Facilities	9
6.5 Surface Water Bodies	9
6.6 Utilities/Pipelines.....	9
7.0 Pre-Subsidence Notification....	10
8.0 Pre-Subsidence Survey	10
9.0 Subsidence Mitigation Program	11
9.1 Description of Program.....	11
10.0 Implementation of Subsidence Mitigation Program.....	12
10.1 Monitoring, Determination of Subsidence Impacts and Resolution of Damages (Non-commercial & Occupied residential dwellings)	12
10.2 Procedures to Address Utilities/Pipelines.....	14
10.3 Commercial Properties	15
10.4 Public Roadways and Related Facilities.....	15
11.0 Summary.....	16

LIST OF EXHIBITS

EXHIBIT	TITLE
1.	<u>Panels 54 through 58 Topographic Map and Coal Contours</u>
2.	<u>Panels 54 through 58 Utilities and Coal Bed Methane Facilities</u>
3.	<u>Panels 54 through 58 Surface Ownership</u>
4.	<u>Panels 54 through 58 Timing Map</u>
5.	<u>Panels 54 through 58 Subsidence Profiles</u>

**SUBSIDENCE CONTROL PLAN UPDATE
CRIMSON OAK GROVE RESOURCES, LLC
OAK GROVE MINE, P-3232**

1.0 INTRODUCTION

McGehee Engineering Corp. (MEC) has prepared this Subsidence Control Plan (SCP) Update for Crimson Oak Grove Coal, LLC (COGC), Oak Grove Mine, which is currently operating under Alabama Surface Mining Commission (ASMC) Permit No. P3232. This updated SCP specifically addresses the extension south of mining in Panels 56, 57, & 58 along with updated timing reflecting the progress of mining since the last SCP was submitted.

2.0 COGR'S COURSE OF ACTION

Under this Plan, as indicated on Exhibit 1, COGR assumes a 30-degree angle of draw to define which property owners may incur subsidence damage and therefore are sent pre-mining notices. COGR also recognizes the requirements that it must either repair subsidence-induced material damage to non-commercial buildings and occupied residential dwellings and related structures to approximate pre-subsidence conditions; or compensate the owner for the diminution in the value resulting from subsidence. COGR will also, in accordance with regulations, provide replacement (i.e., temporary, and/or permanent) water supplies as required to substitute/replace existing drinking, domestic and residential water supplies if they are contaminated, diminished or interrupted by COGR's underground coal mining operations. These requirements apply to all such structures with material damage caused by subsidence.

In addition to the requirements stated above, COGR has adopted a course of action by which it will repair or offer compensation for material damage which it finds was caused by subsidence and will, at its discretion, with the agreement of the property owner, offer to purchase the property at current fair market value in pre-subsidence condition, or offer to compensate for diminution in value of the property caused by subsidence.

In accordance with the course of action stated above, COGR has established a Subsidence Mitigation Program for implementation under this Plan, which includes:

- Advance notification of the planned mining to the owners of property overlying or adjacent to areas of planned mining;
- Pre-mining reconnaissance of the surface;
- Pre- and post-subsidence inspections for subsidence impact, and interim inspections as COGR deems necessary;
- Taking necessary and prudent measures, consistent with the mining method employed, to minimize material damage to non-commercial buildings and occupied residential dwellings and related structures to the extent technologically and economically feasible;
- Repairing material damage to surface lands to the extent technologically and economically feasible by restoring the land to a condition capable of maintaining the reasonably foreseeable uses it was capable of supporting prior to subsidence damage;
- Repairing material subsidence damage to non-commercial buildings and occupied residential dwellings and related structures existing at the time of mining or compensating the owners

for damage resulting from subsidence;

- At COGR's discretion, in lieu of repair, offering to (1) pay to the owners the diminution in value of the property resulting from subsidence, (2) purchase the property at its current fair market value in its pre-subsidence condition.
- Receiving and logging comments and complaints from potentially affected surface owners and responding promptly;

These aspects of COGR's Subsidence Mitigation Program are discussed more thoroughly in subsequent sections pertaining to anticipated subsidence impacts and COGR's policy for response.

3.0 DESCRIPTION OF SURFACE

3.1 Panels 54 thru 58

Mining in the active portion of the mine will consist of Panels 54 thru 58 and the room and pillar mining necessary to facilitate the longwall. Part of Panel 54, all of Panels 55, 56, 57, & part of Panel 58 are proposed to be mined within the five-year period for this plan. Panels 54, 55, 56, 57 and 58 are within solid coal areas (advancing to the west) where no previous room and pillar mining exists. [Exhibit 1](#) presents the topographic map of the area overlying the planned workings in these panels. [Exhibit 2](#) presents the layout of the panels in relation to surface structures (i.e., occupied dwellings, related structures, utilities, coal bed methane wells and other surface features). [Exhibit 3](#) presents the surface ownership of lands above the proposed mining areas.

A survey of structures, features, or renewable resource lands has been conducted. The limits of the survey were determined by a 30° angle of draw from the limits of longwall mining and the areas directly above development mining. Other mining shown outside the subsidence limit line but within the 5-year mining limit line is development mining with permanent pillars which prevent subsidence in those areas. Structures were identified that fall within the 5-year mining limits. The structures identified are used primarily for residential purposes. They are constructed by variable methods such as: brick, block-frame or pre-site manufactured. Some are a combination of methods. These residences may have support structures such as garages, sheds, etc.

The Oak Grove Elementary School is adjacent to proposed mining however; no underground mining activity will be conducted beneath the school. The school is not within the 30-degree angle of draw.

Mining is also proposed beneath Camp Oliver Road, Lock 17 Road, Blue Sky Way, Cargile Drive, Stringfellow Hill Road, Paul Allman Road, Sims Road and String Hollow Drive. These roads are owned and maintained by Jefferson County. They are asphalt surfaced.

There is one business located within the development portion of the mine area between Panels 55 and 56. It

is the “Time Out” Charity Bingo, which is currently not in operation.

There are several coal bed methane wells, operated by PGP, within the mine area along with low pressure pipelines. Some coal bed methane power lines follow access roads within the mine area. Other companies have gas wells within the mining area, but they are all capped and abandoned.

The Warrior River Water Authority has water distribution lines adjacent to the county roads within the mine area.

There do not appear to be any high voltage power transmission lines within Panels 54 through 58 other than those that appear to service COGR’s installations only.

Some of the surface land use is residential. The remainder of surface overlying this mine is predominantly privately owned forest/woodlands, with small parcels of pastureland (hay), grassed clearings, and rural residential development and some previously surface mined areas. The forest/woodlands include tracts that are owned by large corporations and forestry companies, and are presumably managed for timber production to some extent.

4.0 GEOLOGY

The Oak Grove Mine is situated in the Warrior Basin of The Cumberland Plateau Section of the Appalachian Plateau Physiographic Province. The mine extracts the Blue Creek Seam of the Mary Lee Coal Group, a part of the Pennsylvanian-age Pottsville Group. The Blue Creek Seam lies entirely below drainage within the COGR property, with depths of cover ranging from about 600 to 1,200. Strata over the Blue Creek Seam is predominated by thick horizons of shales, with intervening, alternating sequences of siltstones, shales, claystones, coals, and massive sandstones.

5.0 PLANNED MINING

5.1 Mining Plan

Exhibits 1, 2, 3 and 4 presents the proposed mining in relation to major surface features and structures. Development and longwall mining areas are shaded on the referenced exhibits. The 30° angle of draw is shown on all these exhibits. This is measured from the edges of the longwall panels where full extraction will take place. Planned subsidence will be implemented using the longwall mining method with mains and gate entries developed by continuous miners. Planned subsidence will occur during longwall mining. The subsidence limits are based on an angle of draw of 30° as set forth by the ASMC regulations. Continuous miners will develop areas outside the subsidence limit line but within the 5-year mining limit. Permanent pillars will be left in place to prevent subsidence. Longwall panels will be rectangular in shape and vary in lengths and widths. Extraction height reaches 7 feet. This includes coal and rock removal. Overburden depths for longwall panels range from 800 feet up to 1250 feet. The longwall will extract 100 percent of the coal within the panel.

Mains and gate entries will be developed by continuous miners to provide access to the longwall panels. This development method will leave coal pillars in place for support. Pillar sizes will vary depending on geological conditions. Coal blocks or barrier pillars will be left at the ends of each longwall panel (at setup and termination entries), and chain pillars will be left in place at gate roads between successive longwall panels (headgates and tailgates). No secondary recovery of coal within gate roads or setup and termination entries is planned.

5.2 Mining Schedule

[Exhibit 4](#) depicts the planned timing (by month) during the period of May 2026 through March 2030. Obviously, this plan is subject to change depending on market and geologic conditions.

6.0 SUBSIDENCE

6.1 Planned Subsidence

McGehee Engineering utilized the Surface Deformation Prediction System (SPDS) software developed at Virginia Tech to evaluate subsidence at COGR's Oak Grove Mine for the different longwall panels. This software determined subsidence, slope, curvature and horizontal strain. [Exhibit 5](#) shows plots of these parameters for Panels 54, 55, 56, 57 and 58.

6.2 Non-Commercial and Residential Subsidence Impacts

The surface areas above or adjacent to COGR'S planned mining contain several occupied residential dwellings, related structures, drinking water supplies and other surface features. COGR's planned subsidence of these areas could, and in some cases is expected to cause material damage to those dwellings and structures, or could contaminate, diminish, or interrupt drinking, domestic or residential water supplies. An updated well inventory will be conducted during the pre-subsidence surveys as a part of a Water Resource Survey.

COGR employs mining technology that provides for planned subsidence in a predictable and controlled manner. To the extent required by law, COGR will take necessary and prudent measures, consistent with the mining method employed, to minimize material damage to the extent technologically and economically feasible to non-commercial buildings and occupied residential dwellings and structures related thereto except that measures required to minimize material damage to such structures are not required if:

1. The owner consents in writing that protective/mitigative measures not be taken, or
2. The owner denies access to the property to provide protective/mitigative measures, or
3. COGR demonstrates that the costs to protect/mitigate damage to such structures would exceed the anticipated cost of repair.

COGR will assume a 30-degree angle of draw to define which property owners are included in surveys and protective and mitigative measures.

Letters of consent from landowners allowing that mitigative measures not be taken and written proof that access has been denied for the purpose of taking protective/mitigative measures will be included in the pre-subsidence survey. Any demonstration that the cost to mitigate would exceed the cost to repair will be included in the subsidence control plan (pre-subsidence survey) and be approved by the State Regulatory Authority. Justification and documentation required to show why mitigative/protective measures will not be taken on a particular structure will be included in the subsidence control plan (pre-subsidence survey).

6.3 Commercial Facilities

Longwall mining will be conducted beneath and within the 30-degree angle of draw from the commercial facilities addressed. There is one business located within the development portion of the mine area between Panels 55 and 56. It is the “Time Out” Charity Bingo, which is currently not in operation. Pre-subsidence surveys will be offered to the owners of these structures in accordance with this plan and the ASMC regulations.

6.4 Public Roadways and Related Facilities

Potential damage to public roadways and related facilities is anticipated to be limited to cracking, and slight opening or closure of joints and cracks in pavements. Measures to repair damage to public roadways will be based on recommendations made by the appropriate governmental entity. No major transportation structures, such as long-span bridges or culverts, or tunnels, exist within the area that will be affected by subsidence. If mine subsidence damage occurs to public roadways or related facilities, qualified personnel will evaluate and perform repairs consistent with any previous agreements in place and in full compliance with regulations.

6.5 Surface Water Bodies

The water bodies within the mine area are Mud Creek, Sanders Creek, Jess Branch, unnamed tributaries to these streams, and private water impoundments. Planned subsidence has been performed previously on nearby surface areas, including streams, without adverse effects to the surface, such as slope changes causing ponding. No adverse effects on surface drainage or hydrologic systems are anticipated due to planned subsidence, and no measures are planned for protecting stream bed flow or the integrity of the private water impoundments.

6.6 Utilities/Pipelines

Known major pipelines and related facilities, water mains, electrical transmission lines and substations, and a natural gas compressor station are identified on [Exhibit 2](#). Major pipelines (higher pressure, moderate to larger diameter pipelines) traversing one or more longwall panels are shown on these exhibits. Potential subsidence from longwall mining could cause material damage. It may

be necessary to have reduction of pressures and/or exposing the high-pressure gas pipelines overlying the subsidence area during the predominant period of subsidence, successfully precluded damage to the pipelines. Appurtenant equipment sensitive to differential movement and/or that is integrated with a network of partially buried piping is also at risk of damage if located or oriented adversely over the longwall panels. Numerous pipeline Request and Approval letters are in place which apply to the various utility/pipeline owners. COGR and its predecessors have existing Request and Approval letters with the gas operators and their predecessors for the current mine area that will address responsibility for the pipeline during and after mining subsidence occurs. Portions of certain pipelines are covered by Request and Approval letters which state that the pipeline operator shall construct the pipeline to minimize the risk of subsidence damage as well as, assume property damage that may occur as a result of subsidence. COGR will offer to assist these owners to determine whether such lines are capable of withstanding the planned subsidence or whether additional measures such as exposing or unearthing the lines, decreasing pressure, suspending service during mining, monitoring or relocation should be taken to minimize subsidence damage by providing access to available information pertaining to subsidence and subsidence impacts over previous panels. Some of the protective measures that have been implemented previously include unearthing pipelines and reducing pressures. No subsidence-related material damage to active pipelines was noted over any of the previously mined panels. Ownership of the utilities is as follows: Warrior River Water Authority (water), PGP (coal bed methane/natural gas pipelines, coal bed methane wells, processing facility and compressor site) and Alabama Power (electrical transmission lines). Kinder Morgan does have High Pressure Lines shown on the map but they are not within the 30-degree angle of draw.

7.0 PRE-SUBSIDENCE NOTIFICATION

All property owners and occupants of structures over planned subsidence areas will be notified a minimum of six (6) months in advance that mining will occur beneath or adjacent to their property. The notification will include a statement identifying the location and time for mining; and a statement indicating the Subsidence Control Plan can be reviewed at the ASMC's office in Jasper, Alabama.

8.0 PRE-SUBSIDENCE SURVEY

A pre-subsidence survey will be offered to identify type and conditions of structures (including commercial) within the subsidence limits and to identify any structures that are at potential risk of being damaged by subsidence. Once completed, the survey will be used to determine the measures that may be used to prevent material damage or diminution of the value or reasonable use of the surface area. A copy of pre-subsidence survey/evaluation will be provided to the property owner and Regulatory Authority if requested. The owner shall be notified in writing the consequences under 880-X-10D-.58(1)(b)3 of denying access for a pre-subsidence survey.

9.0 SUBSIDENCE MITIGATION PROGRAM

9.1 Description of Program

COGR has adopted a proactive program to address subsidence issues and surface impacts, and to repair non-commercial buildings and occupied residential dwellings and related structures (commercial) or compensate the owners thereof, as prescribed by federal and state mining regulations. COGR also has implemented a Subsidence Mitigation Program comprised of the following primary aspects:

1. Advance Notification - Property owners over areas of planned mining will be informed of COGR's intent to mine coal beneath or adjacent to their properties, and will be informed of the potential for subsidence damage. Notifications will be issued at least six months in advance of the longwall mining beneath the property.
2. Pre-Mining Reconnaissance - COGR or its agents will perform a pre-mining reconnaissance (visual survey) of surface properties over and adjacent to areas of future planned mining to catalogue the types and obvious unique or abnormal features of the structures that occupy the properties. The Pre-Mining Reconnaissance is intended to identify structures within the 30-degree angle of draw of the future mining and, through a qualitative assessment, to preliminarily determine whether any properties may be at risk of material damage.
3. Groundwater Use - COGR or its agents will perform a pre-mining survey to determine the status of the local groundwater users within the proposed mining area. The survey will consist of collecting information from the local water authorities and from direct interviews of potential local groundwater users within the mine area. The pre-mining survey intended to identify local groundwater users within the 30-degree angle of draw of the future mining and to preliminarily determine whether any properties may be at risk of material damage.
4. Pre-Subsidence and Post Subsidence Inspections - COGR or its agents will perform pre-subsidence and post subsidence inspections (and interim inspections if COGR deems necessary), if permitted by the property owner, to document the visible, pre-subsidence and post subsidence condition of each property. The property owner will be requested to participate in these inspections to facilitate accurate identification of significant conditions and features.
5. Protective/Mitigative Surface Measures - COGR, with the agreement of the property owners, will undertake protective measures for non-commercial buildings and occupied residential dwellings which lie within the 30-degree angle of draw. Such measures may include:
 - Temporary structural shoring if recommended at locations sensitive to differential settlement such as retaining walls joined to structures, breezeways or rigid members such as slabs or major additions;
 - Exposing / Modifying utility lines which penetrate structures;

- Temporarily relocating the occupants of structures by agreement with the property owner, should it be determined that imminent danger could result from the proposed mining.

COGR employs mining technology that provides for planned subsidence in a predictable and controlled manner. To the extent required by law, COGR will take necessary and prudent measures, consistent with the mining method employed, to minimize material damage to the extent technologically and economically feasible to non-commercial buildings and occupied residential swellings and structures related thereto except that measures required to minimize material damage to such structures are not required if:

- The owner consents in writing that protective/mitigative measures not be taken.
 - The owner denies access to the property to provide, monitor or adjust such protective/mitigative measures.
 - COGR demonstrates that the costs to protect/mitigate damage to such structures would exceed the anticipated cost of repair.
 - It is not deemed beneficial by a consulting engineering firm or authority.
6. Communications with Surface Owners - COGR will also maintain procedures for receiving and logging verbal reports of subsidence-related impact to property and making follow-up site visits.
 7. Repair of Damage or Compensation for Diminution of Value - On a case-by-case basis, COGR will decide to either repair subsidence induced material damage to non-commercial buildings and occupied residential dwellings and related structures to approximate pre-subsidence conditions, or will compensate the owner for diminution in the value of the property due to the subsidence damage. COGR will also provide replacement (i.e., emergency, temporary, and/or permanent) water supplies which become contaminated, diminished or interrupted due to mining, with water of equivalent quantity and quality as required to substitute/replace existing drinking, domestic and residential water supplies if they are significantly affected by COGR's underground coal mining operations.

10.0 IMPLEMENTAION OF SUBSIDENCE MITIGATION PROGRAM

10.1 Monitoring, Determination of Subsidence Impacts and Resolution of Damage (Non-Commercial and occupied residential dwellings)

COGR will determine the degree to which non-commercial buildings and occupied residential dwellings and related structures and property are affected by subsidence and define a basis for resolution of subsidence damage with property owners as follows;

1. When COGR notifies the owners and occupants of surface property and structures of future mining beneath their properties, COGR will request permission to access the property and structures to conduct a pre-subsidence inspection of structures and surface features within

the assumed 30-degree angle of draw.

2. If the property owner does not permit COGR to perform a complete pre-subsidence inspection, COGR will notify the owner in writing that it will be their obligation to demonstrate that damage is caused by mined subsidence.
3. The pre-subsidence inspection will include an elevation survey of one or more structure corners or ground elevations, and a written, audio, video, or photographic record of the existing condition of structures and features. A pre-subsidence appraisal will also be performed.
4. When subsidence activity is determined to be substantially complete, a post-subsidence survey will be conducted similar to the pre-subsidence survey in “3” above to document and characterize any subsidence damage.
5. After the post-subsidence survey is conducted, COGR or its agents will list features that qualify for repair, and will prepare a construction cost estimate for repair options or will determine the diminished value of the property attributable to the subsidence damage. COGR may at its discretion offer to purchase affected structures at their current market value in their pre-subsidence condition.
6. COGR will maintain working relationships with construction contractors to facilitate the commencement of repairs, after execution of agreements with property owners.
7. Residents of inhabited structures will be temporarily relocated at COGR’s expense, if it is determined that a hazard to occupants of residential dwellings exists from subsidence.

COGR will also provide replacement (i.e., emergency, temporary, and/or permanent) water supplies as required to substitute/replace existing drinking, domestic and residential water supplies if they are significantly affected by COGR’s underground coal mining operations. Upon notification that a user’s water supply was adversely impacted by mining, COGR will reasonably provide drinking water to the user promptly after such notification. Within two weeks of notification, COGR will have the user hooked up to a temporary water supply. The temporary water supply will be connected to the existing plumbing, if any, and allow the user to conduct all normal domestic usage such as drinking, cooking, bathing, and washing. Within two years of notification, COGR will connect the user to a satisfactory permanent water supply. The municipal water systems represent the only currently known drinking, domestic and residential water supplies over the plan area.

Based on past experience over the Oak Grove Mine, the planned longwall mining is not expected to diminish the current or reasonably foreseeable uses of renewable resource lands or other surface lands. Due to the significant overburden thickness, which is dominated by thick shale horizons and massive sandstones, no permanent interruption or irrecoverable loss of flow is expected along the major creeks and streams in the mining area. These conclusions are supported by observations over previously mined areas.

10.2 Procedures to Address Utilities/Pipelines

As shown on [Exhibit 2](#), in the area of anticipated mining influence, the main waterlines (Warrior River Water Authority) are routed adjacent to Camp Oliver Road and Lock 17 Road with branch lines extending up developed, intersecting roadways.

PGP has many low-pressure coal bed methane/natural gas pipelines and coal bed methane wells within the mine area. Other gas companies have gas wells within the mining area, but they are all capped and abandoned. PGP has one high-pressure line within areas to be longwall mined. Kinder Morgan does have High Pressure Lines shown on the map but they are not within the 30-degree angle of draw.

High-pressure pipelines traversing one or more longwall panels are shown on these exhibits. Potential subsidence from longwall mining could cause material damage. It may be necessary to have reduction of pressures and/or exposing the high-pressure gas pipelines overlying the subsidence area during the predominant period of subsidence, successfully precluding damage to the pipelines. Appurtenant equipment sensitive to differential movement and/or that is integrated with a network of partially buried piping may also be at risk of damage if located or oriented adversely over the longwall panels. Numerous easements and right-of-way agreements apply to the various utility/pipeline owners. COGR and its predecessors have existing agreements with the gas operators and their predecessors for the current mine area that will address responsibility for the pipeline during and after mining subsidence occurs. Portions of certain pipelines are covered by waivers of subjacent support and releases of damage from coal mining. COGR will offer to assist these owners to determine whether such lines are capable of withstanding the planned subsidence or whether additional measures such as exposing or unearthing the lines, decreasing pressure, suspending service during mining, monitoring or relocation should be taken to minimize subsidence damage by providing access to available information pertaining to subsidence and subsidence impacts over previous panels. Some of the protective measures that have been implemented previously include unearthing pipelines and reducing pressures. No subsidence-related material damage to active pipelines was noted over any of the previously mined panels.

Ownership of the utilities is as follows: Warrior River Water Authority (water), PGP (coal bed methane/natural gas pipelines, coal bed methane wells, processing facility and compressor site) and Alabama Power Company (electrical transmission lines). Kinder Morgan does have High Pressure Lines shown on the map but they are not within the 30-degree angle of draw.

COGR will notify the owners of utilities/pipelines of COGR's intent to mine under the pipelines, utility lines and related structures, and public roads that cross planned longwall panels approximately six (6) months in advance of mining. COGR will offer the owners access to available information concerning past experiences over completed longwall panels and the protective measures that were selectively implemented (if any), such that the owners can determine and implement the precautions and prudent actions they deem necessary to protect their interests and the public. COGR

will also periodically apprise the utility/pipeline owners of the status on the mining, such that the owners can better manage the potential for subsidence impact to their facilities.

Past experience has shown very little subsidence impact to pipelines, utility lines and related structures. For higher pressure and sensitive pipelines and public roads, if there should be an increased risk of subsidence impact, measures such as exposing the pipelines in open trenches or reducing line pressures as much as practical could be undertaken to minimize damage to or disruption of services provided by such lines during mining. The owners of potentially affected facilities will be apprised of these measures sometimes used to protect such structures from subsidence damage for their consideration when evaluating risks and making decisions concerning the use of protective measures. COGR also recognizes owners of those facilities may have particular expertise appropriate to minimize and address subsidence damage including whether to decrease pressure, suspend service during mining, or relocate those facilities.

10.3 Commercial Properties

The commercial property addressed previously, Time Out Charity Bingo, which is currently not in operation, will be offered the pre-subsidence survey as non-commercial and occupied dwellings. If they choose not to have a survey, they will be notified in writing the consequences under 880-X-10D-.58(1)(b)3 of denying access for a pre-subsidence survey.

Monitoring for subsidence will be conducted as outlined in Section 10.1 for these structures and the surface adjacent to the structures.

If it is determined that damage occurs due to the mining subsidence, COGR will work with the owners to repair or compensate the damages. This would include any costs for mitigation required by ADEM.

10.4 Public Roadways and Related Facilities

Potential damage to public roadways and minor appurtenant facilities is anticipated to be limited to cracking and opening of existing joints and cracks in pavements. No major transportation structures, such as long-span bridges or culverts, or tunnels, exist within the Plan area. If mine subsidence damage occurs to public roadways or related facilities; qualified personnel will evaluate and perform repairs consistent with any previous agreements in place and in full compliance with regulations.

11.0 SUMMARY

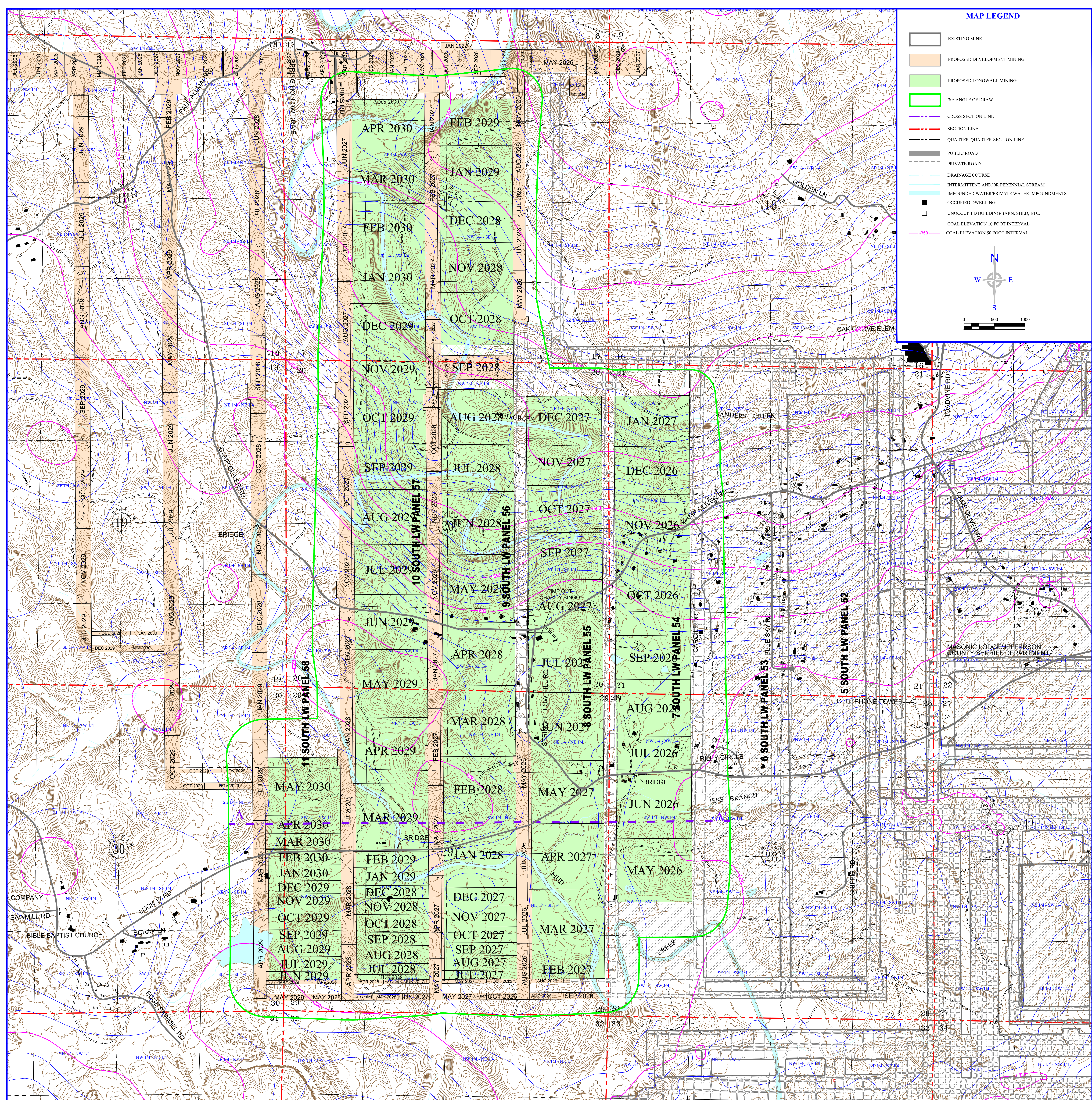
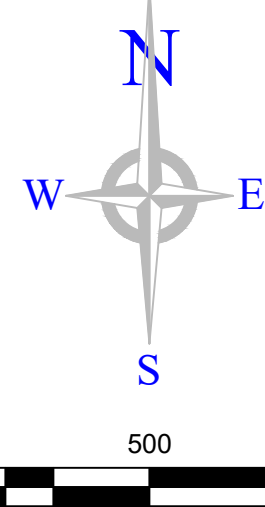
The preceding Subsidence Control Plan presents information on COGR's planned mining of longwall panels for its 5-year mine plan (2026 thru 2030) at its Oak Grove Mine and summarizes pertinent surface and subsurface conditions for the Plan area. Predictions of the ground response over the planned longwall panels are also presented, and potential subsidence impacts are discussed relative to the primary surface features within the presumed zone of influence of the subject panels. COGR's course of action and Subsidence Mitigation Program are described generally and in more specific terms as they will be applied to identify subsidence impacts, assess damage and pursue resolutions of damage with affected property owners. Various exhibits and attachments are included to supplement the discussions, and to support the conclusions of the Plan and COGR's course of action to address subsidence issues.

The Subsidence Mitigation Program will be applied to properties within the prescribed 30-degree angle of draw from the ribs of longwall panels as shown in the exhibits of this plan, and to other properties for comparative purposes at COGR's discretion. The primary components of the Subsidence Mitigation Program provide the mechanisms to protect and compensate the owners of affected non-commercial buildings and occupied residential dwellings and related structures, and to protect drinking, domestic and residential water supplies and the current and reasonably foreseeable uses of surface lands. This Plan thereby fulfills and exceeds the intent of ASMC regulations as they apply to subsidence control and surface protection issues.

EXHIBITS

MAP LEGEND

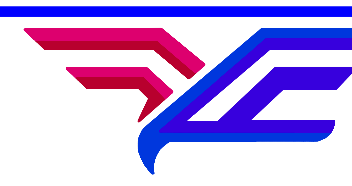
- EXISTING MINE
- PROPOSED DEVELOPMENT MINING
- PROPOSED LONGWALL MINING
- 30° ANGLE OF DRAW
- CROSS SECTION LINE
- SECTION LINE
- QUARTER-QUARTER SECTION LINE
- PUBLIC ROAD
- PRIVATE ROAD
- DRAINAGE COURSE
- INTERMITTENT AND/OR PERENNIAL STREAM
- IMPOUNDED WATER/PRIVATE WATER IMPOUNDMENTS
- OCCUPIED DWELLING
- UNOCCUPIED BUILDING/BARN, SHED, ETC.
- COAL ELEVATION 10 FOOT INTERVAL
- COAL ELEVATION 50 FOOT INTERVAL



NOTES:

- ALL ROADS AND STRUCTURES SUPPLIED BY CRIMSON OAK GROVE RESOURCES, LLC.
- SURFACE CONTOURS TAKEN FROM JEFFERSON COUNTY MAPPING.
- WATER FEATURES TAKEN FROM USGS QUADRANGLE MAPS.
- MINE MAPPING, MINE PROJECTIONS AND COAL CONTOURS FROM SUPPLIED BY CRIMSON OAK GROVE RESOURCES, LLC.

SECTIONS 17, 20, 21, 28, 29, 30, 31 & 32,
TOWNSHIP 18 SOUTH, RANGE 6 WEST
JEFFERSON COUNTY, ALABAMA.
BASE MAP: OAK GROVE U.S.G.S. QUADS.

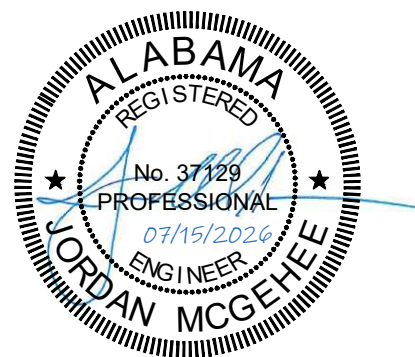


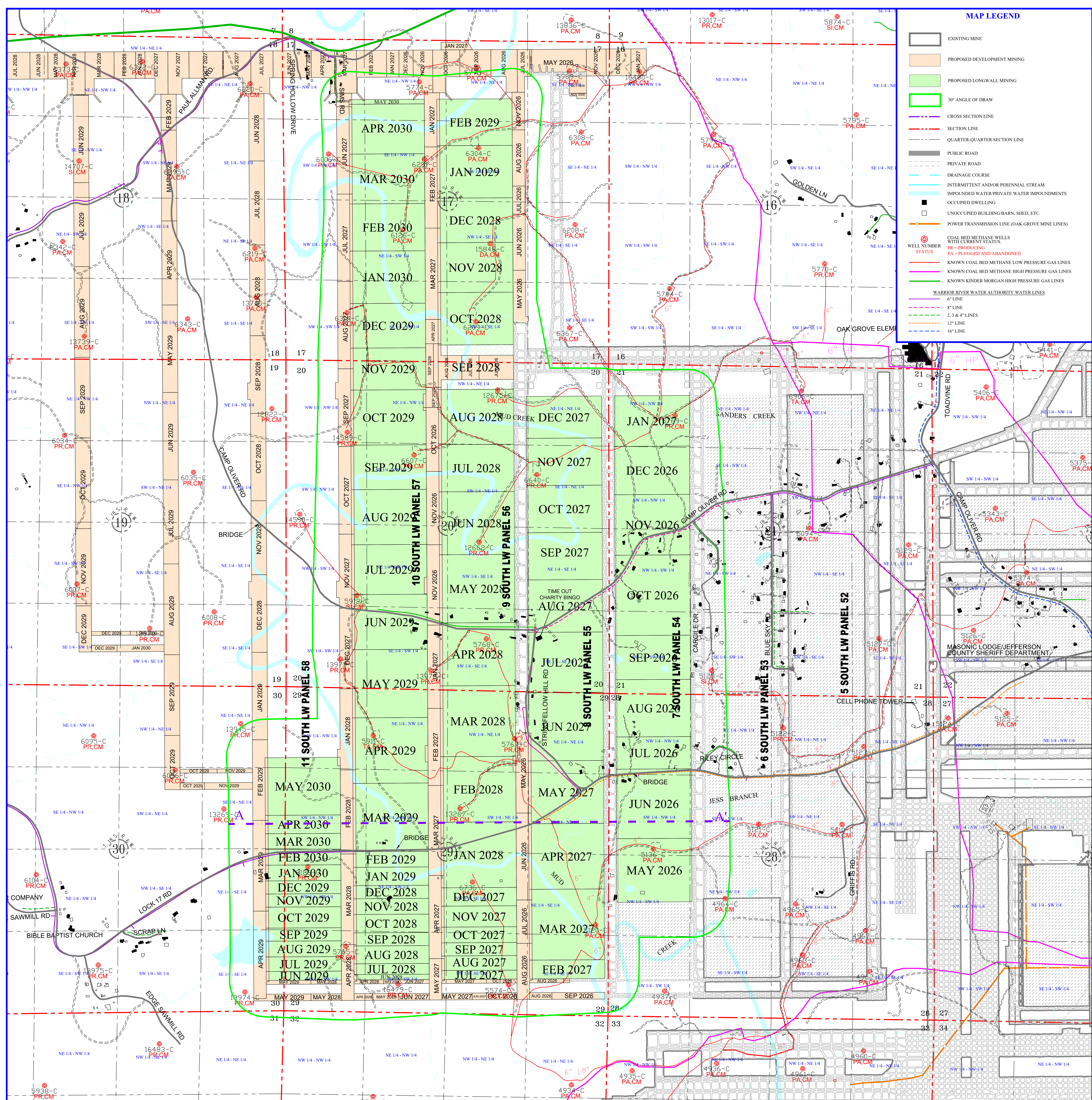
OAK GROVE
OAK GROVE MINE
ASMC PERMIT NO.: P-3232

EXHIBIT 1
SUBSIDENCE CONTROL PLAN
PANELS 54 THRU 58
SURFACE & COAL CONTOURS

FILE: APPROVED BY: A.J.M. SCALE: 1" = 500' DATE: 07/15/2026 JOB NO.: N/A SHEET NO.: 1 OF 1

I HEREBY CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.





MAP LEGEND

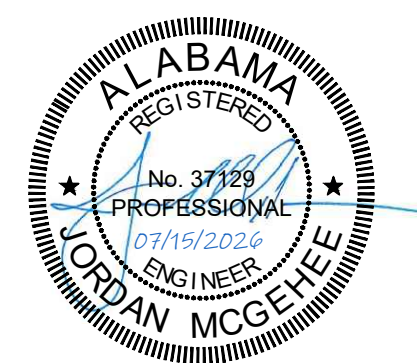
- EXISTING MINE
- PROPOSED DEVELOPMENT MINING
- PROPOSED LONGWALL MINING
- 30° ANGLE OF DRAW
- CROSS SECTION LINE
- SECTION LINE
- QUARTER-QUARTER SECTION LINE
- PUBLIC ROAD
- PRIVATE ROAD
- DRAINAGE COURSE
- INTERMITTENT AND/OR PERENNIAL STREAM
- IMPOUNDED WATER/PRIVATE WATER IMPOUNDMENTS
- OCCUPIED DWELLING
- UNOCCUPIED BUILDING/BARN, SHED, ETC.
- POWER TRANSMISSION LINE (OAK GROVE MINE LINES)
- WELL NUMBER STATUS
 - COAL BED METHANE WELLS WITH CURRENT STATUS
 - PR = PRODUCING
 - PA = PLUGGED AND ABANDONED
 - KNOWN COAL BED METHANE LOW PRESSURE GAS LINES
 - KNOWN COAL BED METHANE HIGH PRESSURE GAS LINES
 - KNOWN KINDER MORGAN HIGH PRESSURE GAS LINES
- WARRIOR RIVER WATER AUTHORITY WATER LINES
 - 6" LINE
 - 8" LINE
 - 2, 3 & 4" LINES
 - 12" LINE
 - 16" LINE

- NOTES:**
1. ALL ROADS AND STRUCTURES SUPPLIED BY CRIMSON OAK GROVE RESOURCES, LLC.
 2. STRUCTURE TYPES FIELD VERIFIED BY MCGEE ENGINEERING CORP.
 3. WATER FEATURES TAKEN FROM USGS QUADRANGLE MAPS.
 4. COAL BED METHANE WELL TAKEN FROM ALABAMA OIL AND GAS BOARD RECORDS
 5. COAL BED METHANE GAS LINES TAKEN FROM MAP SUPPLIED BY CRIMSON OAK GROVE RESOURCES, LLC.
 6. WATER LINES LOCATION PROVIDED BY WARRIOR RIVER WATER AUTHORITY.
 7. NO MAJOR ELECTRIC TRANSMISSION LINES ARE LOCATED WITHIN THE PROPOSED MINE AREA. THERE ARE MANY ELECTRIC SERVICE LINES SERVICING RESIDENCES AND COAL BED METHANE FACILITIES.
 8. EXISTING AND PROPOSED MINE AREAS SUPPLIED BY CRIMSON OAK GROVE RESOURCES, LLC.

SECTIONS 17, 20, 21, 28, 29, 30, 31 & 32,
TOWNSHIP 18 SOUTH, RANGE 6 WEST
JEFFERSON COUNTY, ALABAMA.
BASE MAP: OAK GROVE U.S.G.S. QUADS.

MEC
mcgee engineering corp
post office box 3431
jasper, alabama 35502-3431
telephone: (205) 221-0686 fax: 221-7721
email: staff@mcgee.org

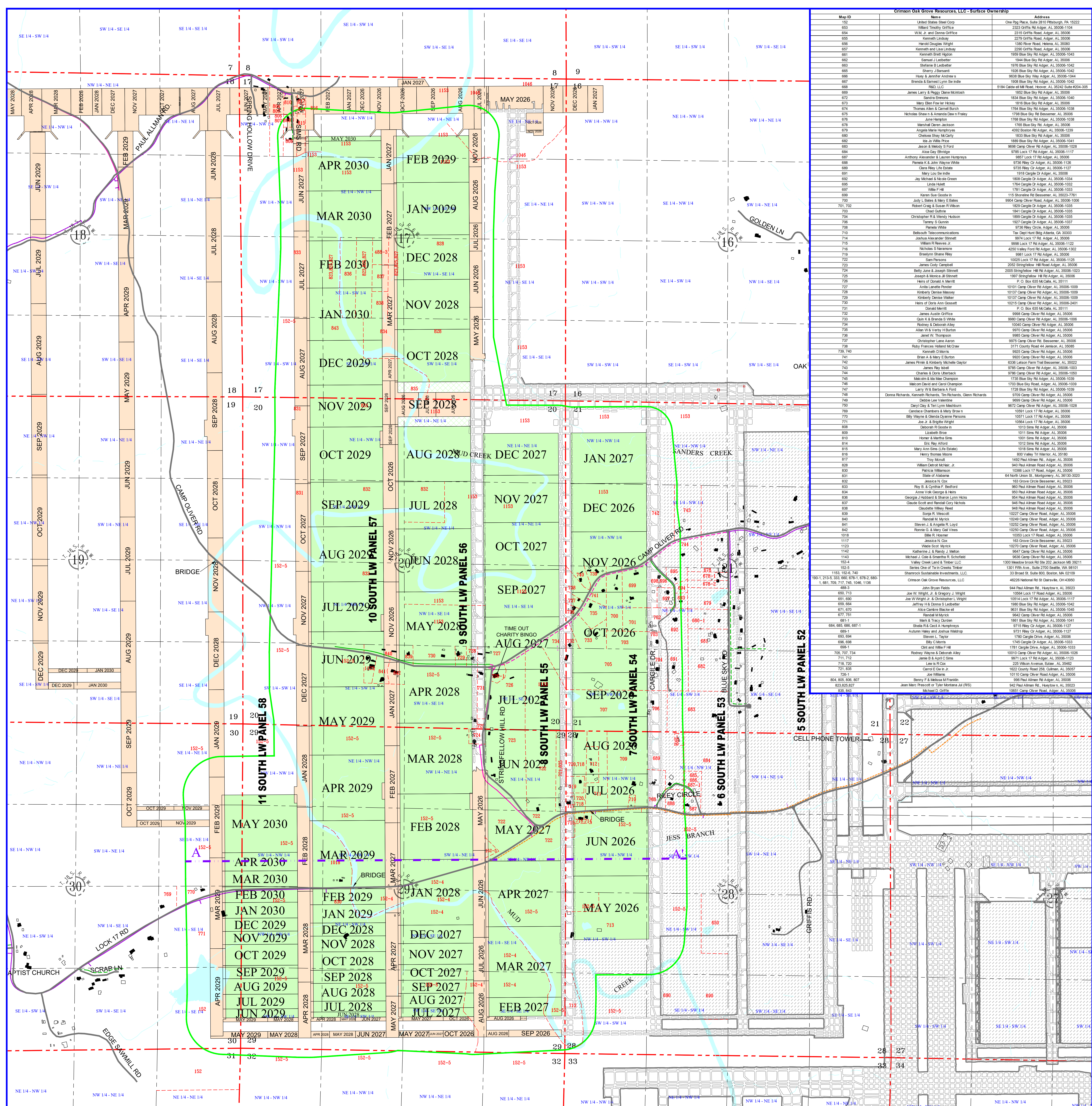
I HEREBY CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



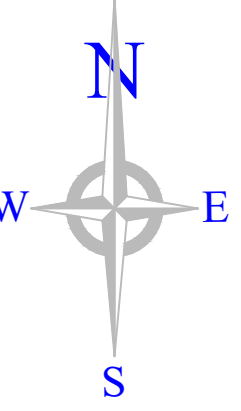
OAK GROVE
OAK GROVE MINE
ASMC PERMIT NO.: P-3232

EXHIBIT 2
SUBSIDENCE CONTROL PLAN
PANELS 54 THRU 58
UTILITIES AND COAL BED METHANE FACILITIES

FILE:	SCALE: 1" = 500'	JOB NO.: N/A
APPROVED BY: A.J.M.	DATE: 07/15/2026	SHEET NO.: 1 OF 1



Crimson Oak Grove Resources, LLC - Surface Ownership		
Map ID	Name	Address
152	United States Steel Corp	One Pgh Place, Suite 2010 Pittsburgh, PA 15222
653	Willard Timothy Griffice	2323 Griffis Rd Adger, AL 35006-1104
654	W.M. Jr. and Donna Griffice	2316 Griffis Road, Adger, AL 35006
655	Kenneth Lawsky	2279 Griffis Road, Adger, AL 35006
656	Harold Douglas Wright	1380 River Road, Helena, AL 35080
657	Kenneth and Lisa Lindsay	2290 Griffis Road, Adger, AL 35006
661	Kenneth Brett Hight	1999 Blue Sky Rd Adger, AL 35006-1043
662	Samuel Ledbetter	1944 Blue Sky Rd Adger, AL 35006
663	Stefanie B Ledbetter	1976 Blue Sky Rd Adger, AL 35006-1042
665	Sherry J Bensant	1926 Blue Sky Rd Adger, AL 35006-1042
666	Haley A Jennifer Andrews	9638 Blue Sky Rd Adger, AL 35006-1044
667	Brenda & Samuel Lynn Sw indie	1908 Blue Sky Rd Adger, AL 35006-1042
668	RGL LLC	5184 Caldw of Mill Road, Hoover, AL 35242 Suite #204-305
669	James Larry & Peggy Jane McIntosh	1652 Blue Sky Rd Adger, AL 35006
672	Sandra Simons	1834 Blue Sky Rd Adger, AL 35006-1040
673	Mary Ellen Fowler Hickey	1816 Blue Sky Rd Adger, AL 35006
674	Thomas Allen & Carmel Burch	1764 Blue Sky Rd Adger, AL 35006-1038
675	Nicholas Shaw & Amanda Dawn Friley	1764 Blue Sky Rd Adger, AL 35006-1117
676	June Hampton	1768 Blue Sky Rd Adger, AL 35006-1038
678	Marshall Daren Jackson	1766 Blue Sky Rd Adger, AL 35006
679	Angela Marie Humphries	4290 Braden Rd Adger, AL 35006-1239
680	Chelsea Shay McCarry	1833 Blue Sky Rd Adger, AL 35006
682	Ita Jo Mills Price	1889 Blue Sky Rd Adger, AL 35006-1041
684	Jason & Mabody S Ford	9698 Camp Oliver Rd Adger, AL 35006-1028
686	Alexa Gay Blintz	9785 Lock 17 Rd Adger, AL 35006-1117
687	Anthony Alexander & Lauren Humphreys	9807 Lock 17 Rd Adger, AL 35006
688	Penela K & John Wayne White	9738 Riley Cr Adger, AL 35006-1126
689	Chana Riley Life Science	9738 Riley Cr Adger, AL 35006-1127
691	Mary Lou Sw indie	1918 Cargile Dr Adger, AL 35006
692	Jay Michael & Nicole Green	1808 Cargile Dr Adger, AL 35006-1034
695	Linda Hallett	1784 Cargile Dr Adger, AL 35006-1035
697	Willie F Hill	1781 Cargile Dr Adger, AL 35006-1035
699	Karen Sue Goodie in	1115 Shoreline Rd Bessemer, AL 35023-7761
700	Judy L Bates & Mary E Bates	9904 Camp Oliver Road, Adger, AL 35006-1006
701	Robert & Susan R Wilson	1853 Camp Oliver Rd Adger, AL 35006-1035
703	Chad Guthrie	1841 Cargile Dr Adger, AL 35006-1035
704	Christopher R & Wendy Hudson	1889 Cargile Dr Adger, AL 35006-1035
706	Tammy S Gumm	1927 Cargile Dr Adger, AL 35006-1035
708	Penela White	9736 Riley Circle, Adger, AL 35006
710	Bellouth Telecommunications	Tax Dept Hunt Bldg Atlanta, GA 30303
714	Joshua Alexander Shinnett	9974 Lock 17 Rd Adger, AL 35006
715	William R Reeves, Jr	9986 Lock 17 Rd Adger, AL 35006-1126
716	Nicholas S Naramore	4250 Valley Ford Rd Adger, AL 35006-1302
719	Breelwyn Shane Riley	9981 Lock 17 Rd Adger, AL 35006
722	Sam Person	10023 Lock 17 Rd Adger, AL 35006-1135
723	James Cody Campbell	2052 Stringfellow Hill Road Adger, AL 35006
724	Betty June & Joseph Sinnerell	2005 Stringfellow Hill Rd Adger, AL 35006-1023
725	Joseph & Monica A Sinnerell	1997 Stringfellow Hill Rd Adger, AL 35006
726	Helen of Donald A Merritt	P. O. Box 635, Adger, AL 35006
727	Anita Lanette Ponder	10101 Camp Oliver Rd Adger, AL 35006-1009
728	Kimberly Denise Messay	10137 Camp Oliver Rd Adger, AL 35006-1009
729	Kimberly Denise Walker	10137 Camp Oliver Rd Adger, AL 35006-1009
730	Helen of Doris Ann Gosssett	10215 Camp Oliver Rd Adger, AL 35006-2401
731	Donald Merritt	P. O. Box 635 McCalla, AL 35111
732	James Austin Griffin	9998 Camp Oliver Rd Adger, AL 35006
733	Quin K & Branda S White	9980 Camp Oliver Rd Adger, AL 35006-1006
734	Rodney & Deborah Alley	10040 Camp Oliver Rd Adger, AL 35006
735	Allen W & Vicky H Burton	9970 Camp Oliver Rd Adger, AL 35006
736	James W. Thompson	9980 Camp Oliver Rd Adger, AL 35006
737	Christopher Lane Aaron	9975 Camp Oliver Rd, Bessemer, AL 35006
738	Ruby Frances Holland McCraw	3171 County Road 44, Jamison, AL 35088
739	Kenneth D Harris	9923 Camp Oliver Rd Adger, AL 35006
741	Brian A & Mary E Burton	9920 Camp Oliver Rd Adger, AL 35006
742	James Pinner & Kimberly Michelle Gaytor	6336 Letson Farm Trail Bessemer, AL 35022
743	James Ray Abel	9786 Camp Oliver Rd Adger, AL 35006-1003
744	Charles & Doris Overback	9786 Camp Oliver Rd Adger, AL 35006-1003
745	Macdon & Lisa Mae Champion	1738 Blue Sky Rd Adger, AL 35006-1038
746	Macdon David and Carol Champion	1703 Blue Sky Rd Adger, AL 35006-1038
747	Larry W & Barbara A Ford	1738 Blue Sky Rd Adger, AL 35006-1038
748	Donna Richards, Kenneth Richards, Tim Richards, Glenn Richards	9708 Camp Oliver Rd Adger, AL 35006
749	Debbie Lee Valentine	9699 Camp Oliver Rd Adger, AL 35006
750	Daryl Clay & Tim Lynn Macbeth	9672 Camp Oliver Rd Adger, AL 35006-1028
759	Candace Chantrea & Mely Brown	10591 Lock 17 Rd Adger, AL 35006
770	Billy Wayne & Glenda Dyanne Parsons	10671 Lock 17 Rd Adger, AL 35006
771	Joe Jr. & Bright Wright	10644 Lock 17 Rd Adger, AL 35006
809	Deborah S Gooden Jr	10133 Sims Rd Adger, AL 35006
810	Lizabeth Broe	10111 Sims Rd Adger, AL 35006
811	Horner & Martha Sims	1001 Sims Rd Adger, AL 35006
812	Eric Ray Alford	1012 Sims Rd Adger, AL 35006
815	Mary Ann Sims (Life Estate)	1018 Sims Rd Adger, AL 35006
816	800 Valley Trl Warrior, AL 35180	
817	Troy Mcnutt	9400 Paul Altman Rd, Adger, AL 35006
820	William Daniel McNeil, Jr.	940 Paul Altman Road Adger, AL 35006
828	Patricia Williamson	10366 Lock 17 Road, Adger, AL 35006
831	State of Alabama	64 North Union St., Montgomery, AL 36130-3020
832	Jessica N Cox	163 Grove Circle Bessemer, AL 35022
833	Roy B. & Cynthia R. Bedford	960 Paul Altman Road Adger, AL 35006
834	Anne Volk George & Heirs	950 Paul Altman Road Adger, AL 35006
836	Georgia L Hubbard & Sharon Lynn Hobbs	954 Paul Altman Road Adger, AL 35006
837	Onaide Scott and Ronald Cary Nichols	945 Paul Altman Road Adger, AL 35006
838	Claudette Wilkey Reed	948 Paul Altman Road Adger, AL 35006
839	Song R. Wescott	10227 Camp Oliver Road, Adger, AL 35006
840	Randall M. Murrick	10245 Camp Oliver Road, Adger, AL 35006
841	Steven J. & Angela R. Loyd	10252 Camp Oliver Road, Adger, AL 35006
842	Romeo C. & Mary Gail Vines	10250 Camp Oliver Road, Adger, AL 35006
843	Riley R. Hooper	10263 Lock 17 Road, Adger, AL 35006
1117	Jessica N Cox	163 Grove Circle Bessemer, AL 35023
1123	10270 Camp Oliver Road, Adger, AL 35006	
1142	Katharina J. & Randy J. Melton	9647 Camp Oliver Rd Adger, AL 35006
1143	Michael L. Cole & Sherrille R. Schufeldt	9638 Camp Oliver Rd Adger, AL 35006
152-4	Valley Creek Land & Timber LLC	1300 Meadowbrook Rd Ste 202 Jackson MS 39211
152-5	Series One of Two in Creek Timber	1301 Fifth Ave., Suite 2700 Seattle, WA 98101
152-6	Quatross Sustainable Investments, LLC	23 Broad St., Suite 800, Seattle, WA 98102
190-1, 213-5, 333, 660, 678-1, 678-2, 680-1, 681, 709, 717, 745, 1046, 1138	Crimson Oak Grove Resources, LLC	46226 National Rd St Clairsville, OH 43080
463-3	John Bryan Fields	944 Paul Altman Rd., Hwy101 n. AL 35023
650, 713	Joe W. Wright, Jr. & Gregory J. Wright	10664 Lock 17 Road Adger, AL 35006
651, 690	Joe W. Wright, Jr. & Christopher L. Wright	10514 Lock 17 Rd Adger, AL 35006-1117
654	Jeffrey H & Donna S Ledbetter	1989 Blue Sky Rd Adger, AL 35006-1042
671, 670	Alice Cambrine Blackwell	9631 Blue Sky Rd Adger, AL 35006-1045
687, 751	Randall M. Murrick	9642 Camp Oliver Rd Adger, AL 35006
681-1	Mark & Tracy Darden	1861 Blue Sky Rd Adger, AL 35006-1041
684, 685, 686, 687-1	Shelia R & Cecil A Humphreys	9715 Riley Cr Adger, AL 35006-1127
689-1	Autumn Haley and Joshua Waldrup	9731 Riley Cr Adger, AL 35006-1127
692, 694	Steven L. Taylor	1745 Cargile Dr Adger, AL 35006-1033
696, 698	Billy Morris	1745 Cargile Dr Adger, AL 35006-1033
699-1	Clint and Willie F Hill	1781 Cargile Drive, Adger, AL 35006-1033
705, 707, 734	Rodney Wayne & Deborah Alley	10010 Camp Oliver Rd Adger, AL 35006-1026
711, 712	James B & April C Sims	9971 Lock 17 Rd Adger, AL 35006-1123
716, 720	225 Wilson Avenue, Edgely, AL 35462	
721, 835	Carol Olin Jr.	1822 County Road 258, Cullman, AL 35057
725-1	Joe Williams	10110 Camp Oliver Road Adger, AL 35006
804, 805, 806, 807	Benny F. & Melissa M. Fossion	960 Paul Altman Rd Adger, AL 35006
823, 825, 827	Jean Marc Pessot of Tyler Montana Jul (RS)	942 Paul Altman Rd., Hwy101 n. AL 35023
835, 843	Michael D. Griffin	10651 Camp Oliver Road, Adger, AL 35006



MAP LEGEND

	EXISTING MINE		152-4	SURFACE OWNERS MAP ID
	PROPOSED DEVELOPMENT MINING			PUBLIC ROAD
	PROPOSED LONGWALL MINING			PRIVATE ROAD
	30° ANGLE OF DRAW			OCCUPIED DWELLING
	SURFACE OWNERSHIP LINE			UNOCCUPIED BUILDING/BARN, SHED, ETC.
	DRAINAGE COURSE			QUARTER-QUARTER SECTION LINE
	INTERMITTENT AND/OR PERENNIAL STREAM			SECTION LINE
	IMPOUNDED WATER/PRIVATE WATER IMPOUNDMENTS			CROSS SECTION LINE

NOTES:

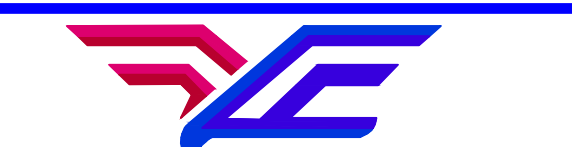
1. ALL ROADS AND STRUCTURES SUPPLIED BY CRIMSON OAK GROVE RESOURCES, LLC.
2. STRUCTURE TYPES FIELD VERIFIED BY MCGHEE ENGINEERING CORP.
3. PROPERTY LINES ARE QUARTER-QUARTER SECTION LINES EXCEPT WERE SHOWN OTHERWISE.
4. PROPERTY LINES AND OWNERSHIP WAS TAKEN FROM THE JEFFERSON COUNTY GIS MAPPING.
5. SURFACE OWNERS AND ADDRESS TAKEN FROM JEFFERSON COUNTY GIS.

0 500 1000



I HEREBY CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SECTIONS 17, 20, 21, 28, 29, 30, 31 & 32,
TOWNSHIP 19 SOUTH, RANGE 6 WEST
JEFFERSON COUNTY, ALABAMA
BASE MAP: OAK GROVE U.S.G.S. QUADS.



OAK GROVE MINE
ASMC PERMIT NO.: P-3232

EXHIBIT 3
SUBSIDENCE CONTROL PLAN
OWNERSHIP MAP

FILE:	SCALE: 1" = 500'	JOB NO.: N/A
APPROVED BY: A.J.M.	DATE: 07/15/2026	SHEET NO.: 1 OF 1

