



A Tradition of Stewardship
A Commitment to Service

Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

David Morrison
Director

MEMORANDUM

To: Heather Phillips, Chair Napa County Planning Commission	From: Donald Barrella Planner III
--	--------------------------------------

Date: July 10, 2015	Re: Syar Napa Quarry Surface Mining Permit P08-00337 Alternative Analysis
---------------------	---

I. PURPOSE:

On August 12, 2015, the Commission will consider certifying a Final Environmental Impact Report (Final EIR) for the Syar Napa Quarry expansion project and subsequently considering action on the associated Surface Mining Permit (SMP) to allow an expansion to the Syar Napa Quarry including an increase in production levels. As part of the Commission's review and consideration of the proposed Project the Commission, as the decision making body, is obligated to consider alternatives to the proposed Project.

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines requires consideration of alternatives that could reduce to a less-than-significant level or eliminate any significant adverse environmental effects, or would avoid or substantially lessen any of the significant effects of the proposed project, including alternatives that may be more costly or could otherwise impede the proposed project's objectives. Alternatives considered must include those that offer substantial environmental advantages over the proposed project. However, an EIR is not required to consider every possible alternative, but must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.

The purpose of this analysis is to clarify and refine the potential benefits and detriments of each alternative identified in the Draft EIR and provide the Commission, at their direction, with an additional alternative (or Hybrid Alternative) for their consideration. The Hybrid Alternative is primarily intended to further lessen impacts that were identified to be less than significant with or without mitigation incorporated; however could still be considered disruptive to the neighboring community due to the facilities location and surrounding uses. Following the Background discussion below there is a table/matrix showing the potential benefits and detriments of each alternative including the Hybrid Alternative (or the Reduced Production and Footprint Alternative).

II. BACKGROUND:

The Draft EIR for the proposed Project included three alternatives: the No Project Alternative, the Reduced Production Alternative, and the Reduced Footprint/Conservation Alternative.

Reduced Production Alternative: The Reduced Production Alternative would reduce proposed production from 2 million tons per year down to 1.3 million tons per year, and was identified as the Environmentally Superior Alternative because it would reduce potentially significant unavoidable and un-mitigatable greenhouse gas emissions and significant air quality impacts associated with the proposed project to less than significant levels with mitigation incorporated. The reduction in annual production from 2 million tons to 1.3 million tons per year would roughly correlate to an approximate 58% reduction in proposed production from a proposed increase of approximately 1.2 million tons per year above baseline conditions (810,363 tons per year), to a proposed increase of approximately 0.5 million tons per year above baseline conditions (i.e. baseline condition of approximately 800,000 tons per year, plus approximately 500,000 tons per year, equals 1.3 million tons per year). However, this alternative would have the same excavation area (or footprint) as the proposed project.

During noticed public hearings held at the beginning of this year (January 7th and February 18th), staff recommended that the Planning Commission adopt the Reduced Production Alternative: the Commission during testimony and discussion during these hearings endorsed this Alternative. Subsequently, on March 17 2015, the applicant formally agreed to implement the Reduced Production Alternative as part of their proposed project.

Implementation of this of this alternative is expected to reduce GHG emissions and the emissions of criteria pollutants, toxic air contaminants, and dust associated with production because of fewer vehicle and equipment miles traveled both on and off-site, and less use of processing equipment (including mobile mining equipment). For example this alternative would reduce anticipated daily trips to and from the site by approximately 300 trips per day from 500 to 200 trips per day.

This alternative would result in a reduction in groundwater water use relative to the proposed project; however, increases in groundwater water use over baseline conditions would still occur. Annual anticipated water use would increase due to increased aggregate processing and production, and for dust control on haul roads due to increased haul distances between mining areas and processing areas as the footprint expands. Increased groundwater use could also occur as a result increased mining depth because the exposure of groundwater would increase the potential for its loss (or use) due to evaporation and runoff. It is expected the proposed mining depth (50 above mean seal level) would be below the local groundwater elevation. Increased mining activities, including increased footprint and depth, could also result in water quality impacts due to increased runoff or exposure of groundwater. These potentially significant impacts as a result of the proposed project would still occur under this Alternative. Therefore identified mitigation to limit groundwater extraction, limit the depth of excavation, and address other potential hydrologic issues will still need to be implemented (see Mitigation Measures 4.8-1 through 4.8- 13.).

With respect to biological, aesthetic, and cultural impacts, this alternative would result in the same impacts identified in the DEIR as with the proposed project. Therefore, identified impact levels to these resources and associated mitigation measures identified in the DEIR would need to be implemented with this alternative.

As indicated the Reduced Production Alternative is expected to reduce potentially significant and unavoidable impacts and result in fewer impacts than the proposed project, primarily those associated air quality, water use, and traffic, due to substantially decreased annual production levels, however it would have the same footprint as the proposed project. Therefore, potential noise and esthetic impacts to adjacent uses could be perceived as more disruptive to the surrounding community and uses and to Skyline Wilderness Park (SWP) and users of SWP.

No Project Alternative: Under the No Project Alternative, the quarry would continue to operate under current entitlement that has limited to no specific limitations or mitigations that are specialized to current mining and quarrying operations. Approximately 497 acres of the site would continue to be mined and aggregate processing would continue. Annual production would not have specified limitations. After mining of mineral resources had been completed, reclamation would commence on the entirety of the site per the existing Reclamation Plan. Current practices implemented by the operator to reduce environmental impacts, such as watering the unpaved roads to control fugitive dust and implementing best management practices to control polluted and/or increased runoff, are expected. No changes to the existing facilities or the authorized mining footprint would occur.

Through continued aggregate mining and processing under current entitlements, there are approximately 114-acres of oak woodland, grassland, and chamise that have not been disturbed by current mining activities that could be mined based on current entitlements. Most of this undisturbed acreage occurs in isolated patches within the larger 497-acre quarry, except for an approximate 14.75-acre area along the eastern property line adjacent to the Pasini Parcel and an approximate 47.3-acre area located in between and south of the State Gray and State Blue Pits could be mined. Effects of mining under current entitlements would essentially remain the same with on-going air pollutant emissions, noise, disturbances to biological resources, storm water runoff, traffic, and greenhouse gas emissions. Mining operations would continue to comply with state and federal permitting requirements that influence mining activities, such as ongoing air permits issued through the Bay Area Air Quality Management District for stationary equipment and ongoing implementation of the Storm Water Pollution Prevention Plan (SWPPP) to address potential water quality issues.

Existing views of the quarry and the existing visual character of the area would continue to change over time as mining continues under the existing entitlements. Changes to the existing visual character of the site and area are not expected to substantially altered because most of the approximate 114-acres of land under current entitlements that has not been disturbed is isolated patches within the larger mining area there is the potential for noticeable changes because of the approximate 14.75-acre undisturbed area located along the eastern property line adjacent to the Pasini Parcel and portions of an approximate 47.3-acre area located in between and south of the State Gray and State Blue Pits could be mined.

Air pollutant and GHG emissions associated with existing mining and processing activities would

continue under the No Project Alternative. While increases in pollutant emissions are not expected to occur provided production does not exceed baseline condition there would be potential air quality and GHG impacts with production over baseline conditions.

With the No Project Alternative, approximately 350 feet of rock wall located on APN 046-390-003 at the northern end of the Snake Pit could be removed in the course of mining activities, and other unidentified cultural resources could be encountered.

Noise and vibration effects of the No Project Alternative would remain essentially the same as existing conditions as mining would generally not extend closer to adjacent receptors. However, as previously noted there is an approximate 30-acre area along the eastern property line adjacent to the Pasini Parcel that has not been disturbed/mined that could under current entitlements. Mining of this area would bring mining closer to SWP.

Traffic associated with the facility would generally remain the same provided production does not exceed baseline condition.

Under the No Project Alternative, impacts associated with air quality, greenhouse gas emissions, and traffic congestion could increase after operation of the Quarry has ceased because demand for local aggregate is expected to continue with or without the Quarry. Without a local source, construction projects would need to find an alternative source of aggregate products. The Quarry primarily serves several cities in the immediate area, such as: Napa, American Canyon, Yountville, St. Helena, Calistoga, and Vallejo as well as a majority of unincorporated Napa County. These service areas are between one and 26 miles from the Quarry. Depending on the location of a particular construction projects, the next closest source of aggregated supply could be a quarry in the Lake Herman Quarry in Solano County located approximately 15 miles to the southeast, or quarries in Sonoma and Contra Costa County located approximately 40 miles to the southeast and west. This would potentially increase the distance between aggregate supply and service areas from one to 26 miles, to a range of 16 to 66 miles. As such this alternative may not further promote General Plan land use policies and goals, since it would not necessarily provide for a continuing local source of aggregate products.

Reduced Footprint/Conservation Alternative: Under the Reduced Footprint/Conservation Alternative approximately 35-acres would be removed from the proposed mining footprint: these areas are located in the proposed expansion areas as further described below (see Figures A1a and A1b). Under this alternative the originally proposed production of 2 million tons per year would remain, therefore potential impacts that are associated with this production amount, such as air quality, noise, traffic, greenhouse gas emissions, and water use would remain the same as with the proposed project. The objective of the Reduced Footprint/Conservation Alternative is to further reduce potential impacts and effects of the proposed project beyond the mitigated project, such as visual/aesthetic changes, biological resources, and cultural resources, whether or not such impacts are required to be mitigated or are considered to be less than significant to conserve and maintain more environmental characteristics of the site.

While the project would not result in significant impacts to aesthetics, it would result in visual changes,

as topographic and vegetative features are removed. Removal of these features would reduce buffering and screening between SWP and mining activities, in particular from some of the more remote areas of SWP. These changes would not occur in the southeast portion of the project area under the Reduced Footprint/Conservation Alternative because the knoll and associated vegetation in the northern portion of the Pasini Parcel would essentially remain, thereby maintaining existing visual shielding of mining activities from portions of the park, as well as maintaining this feature as seen from SWP. Generally only the southern foot-slopes of the Pasini knoll would be mined under this alternative. Retention of the knoll would also reduce the amount of visual change as seen from the west. While this alternative would provide an expanded buffer along the eastern property line in the vicinity of the State Blue Pit, it would not materially change the visual changes that would occur in this portion of the quarry under the proposed project as seen from SWP or other off-site locations. This alternative would also preserve the Pasini Pond which is an aesthetic feature of the area as seen from portions of SWP. Under the proposed project the drainages that supply the pond with runoff water would be removed, thereby effectively eliminating the pond.

Because the acoustical shielding provided by the knoll and associated vegetation that separates the park from the quarry would remain, this alternative would substantially reduce potential noise and vibration effects in the southern portions of SWP. Potential noise and vibration effects in the northern portions of SWP and to public institutional and residential uses to the north would remain the same as under the proposed project because the increased buffer along the eastern property line in the vicinity of the State Blue Pit would not retain any significant amounts of acoustical shielding (i.e. terrain and vegetation) between the quarry and adjacent uses in this area.

As indicated this alternative would reduce the proposed footprint by approximately 35-acres, resulting in approximately 28-acres of oak woodland being retained. While the areas retained do not contain special or unique habitat, the biological functions and value provided by these oak woodlands and grasslands would be maintained. Additionally, the biological function and value of the pond on the Pasini Parcel provides would also be retained.

The Reduced Footprint/Conservation Alternative would increase Exclusion Areas in the following areas:

- A. Increase the buffer at the interface between SWP and the quarry in the vicinity of the State Blue Pit (i.e. along the eastern property line of APN 046-370-012) to ensure its preservation and provide it with a 10 foot buffer from adjacent mining activities. This Exclusion Area increase would remove approximately 1.5-acres from the project and retain approximately 0.75-acre of oak woodland. This increase buffer would also provide greater protection to the existing rock wall that runs along the eastern property line (see Figure A1a – Area B).
- B. Increase the Exclusion Area to include the knoll located within the northern portion of the Pasini Parcel (APN 046-390-002) from the mining footprint. The modified Exclusion Area would extend out to approximately the 800 foot elevation line so that mining in this area would generally be at or below elevations within SWP. This Exclusion Area increase would remove approximately 30-acres from the project and retain approximately 25-acres of oak woodland (see Figure A1a – Area B).

- C. Increase the Exclusion Area in the southeast corner of the project area (i.e. along the property lines in the southeast corner of the Pasini Parcel – APN 046-390-002) to retain the drainage channel and associated oak woodland supplying the Pasini Pond. This Exclusion Area increase would remove approximately 3.5-acres from the project and retain approximately two acres of oak woodland (see Figure A1a – Area C).

Reduced Production and Reduced Footprint (Hybrid) Alternative: A Hybrid Alternative has been developed at the request of the Planning Commission and is intended to further lessen the environmental effects related to biological resources, noise, aesthetics and air quality potentially resulting from the proposed project and quarry operations on surrounding uses, in particular SWP and the public institutional and residential uses to the north. This Hybrid alternative was developed by combining the Reduced Production Alternative and elements of the Reduced Footprint/Conservation Alternative (or portions thereof) that were identified in the Draft EIR. In addition, this alternative includes the recent project modifications proposed by the applicant, which excludes approximately 15.5-acres from the proposed mining area¹ as well as additional exclusion areas that were not originally identified in the Reduced Footprint/Conservation Alternative.

The intent of this alternative is to minimize significant unavoidable or un-mitigatable impacts (i.e. GHG and Air Quality impacts), further lessen/reduce potentially significant and less than significant impacts of the proposed project, and further promote General Plan Goals and Policies as they related to Resource Conservation, Community Character, and Recreation and Open Space. This alternative includes a production limitation of 1.3 million tons per year as identified in the Reduction Production Alternative and includes the primary benefit of reducing significant unavoidable impacts related to GHG and Air Quality to a less than significant level.

This alternative would also expand the Exclusion Areas in the northeast corner of the site (i.e. adjacent to the State Blue Pit), modify the mining areas in the Pasini Parcel to expand the Exclusion Areas within this parcel (however not to the extent of the Reduced Footprint/Conservation Alternative identified in the Draft EIR), and expand the Exclusion Area in the southeast corner of the site (i.e. Pasini Pond area) consistent with what was identified in the Reduced Footprint/Conservation Alternative. These expanded Exclusion Areas, that are exclusively are located in the proposed expansion areas, are further described below (also see Figures A2a and A2b).

- A. **State Blue Pit Area:** Increase the Exclusion Area at the interface between SWP and the northeastern portions the quarry to include the approximate 10.7-acre area north of the existing rock wall and east of the State Blue Pit located within APN 046-450-071 (as recently modified by Syar¹) in addition to an approximate 15.3-acre area extending east from the 650 foot elevation of APN 046-370-012 to the eastern property line of said parcel. This expanded ±26. acre Exclusion Area would: retain existing trails that are located on Syar property; maintain the existing foreground views from Skyline Trail as seen from the portions of the trail that are located along the eastern property line of APN 046-370-012; locate mining below the eastern

¹ This area corresponds to the area that was formally removed from the project area by Syar on March 17, 2015: see Figure 3.

elevations of SWP to maintain existing shielding due to the significant slope break that commences at approximately the 680 foot elevation in this area; generally maintain mining at or below corresponding elevations as seen from the north; generally maintain mining below the existing ridgeline buffer located between the State Grey and State Blue mining areas reducing its visibility as seen from the west; and, retain approximately 16.5-acres of oak woodland. The expanded Exclusion area would generally provide buffers ranging from approximately 400 feet to 1,100 feet from the eastern side of SWP (see Figure A2a – Area A). A minimum 50 foot buffer from the rock wall located north of the State Blue Pit (that runs in an east west direction) would be provided.

- B. Pasini Parcel (Knoll) Area: Increase the Exclusion Area to include areas east of the existing rock wall located on the eastern side of the knoll and increased buffers ranging from 100 feet to approximately 400 feet from the northern side of the knoll to SWP. The modified Exclusion Area would preserve woodlands and existing features (i.e. rock walls) along the east side of the knoll and preserve woodlands on the northeast and northwest side of the knoll to provide additional topographic and vegetated shielding of the quarry to SWP. This expanded Exclusion Area would remove approximately 17.3-acres from the project and retain approximately 11.5-acres of oak woodland (see Figure A2b – Area B).
- C. Pasini Pond Area: Increase the Exclusion Area in the southeast corner of the project area (i.e. along the property lines in the southeast corner of the Pasini Parcel – APN 046-390-002) to retain the drainage channel supplying the Pasini Pond and associated oak woodland. This Exclusion Area increase would: maintain the aesthetic features of the pond as seen from SWP and its ecological function; would remove approximately 3.8-acres from the project; and, retain approximately 2-acres of oak woodland (see Figure A2b – Area C).

As previously noted, while the project would not result in significant impacts to aesthetics, it would result in visual changes as topographic and vegetative features are removed. Under this alternative these changes would be substantially reduced as seen from off-site locations including SWP. As detailed above the increased Exclusion Area adjacent to the State Blue pit would result in mining activities generally occurring below the elevations of SWP to the east and generally at or below elevations to the north and west. The increased retention of vegetation in these areas would also reduce the level of visual changes that would occur under the proposed project. With regard to the Pasini Knoll the objective of the modified Exclusion Area is to provide for expanded minable area while retaining features that shield and buffer the quarry from SWP, as well as retain more of the aesthetic and cultural features of the Pasini Parcel, in particular rock walls associated with the parcel. While these walls were not considered significant cultural resources in the Cultural Resources Evaluation (Origer and Associates, October 2010) their preservation would be consistent with General Plan Community Character Goal CC-4 and Policy CC-19, which encourage the preservation of the County's cultural and historic resources.

Along the eastern side of the Pasini Knoll the exclusion area was adjusted to follow along the western side of the existing rock wall located there (plus 50 foot buffer) so this feature and screening trees/vegetation could be retained. From the end of the rock wall the boundary would generally follow the 855 foot elevation northward until reaching a 100 foot buffer from the property line, which would maintain screening trees/vegetation on the northeast side of the knoll. As originally

proposed no vegetated shielding/screening would be maintained between SWP and these sides of the knoll. From the northern side of the knoll the expanded Exclusion Area would extend in a southwestern direction to maintain a large grouping of oak trees located on the northwest side of the knoll. As originally proposed essentially no vegetative shielding was maintained in this area. This alternative would also preserve the Pasini Pond which is an aesthetic feature of the area as seen from portions of SWP: under the proposed project the drainage course that supply the pond with runoff water would be removed, thereby effectively eliminating the pond. While visual changes would occur under this alternative they would be substantially less than the proposed project, in that the expanded exclusion areas would maintain more topographical features and vegetation to screen and shield mining activities from surrounding views.

As described above the expanded exclusion areas would result in substantially larger buffers from SWP and uses to the north (i.e. in the Blue Pit area), and provide larger buffers between SWP and the Pasini Knoll which would maintain topographic features and vegetation that would provide visual and acoustic shielding in these areas for the longest time possible. Therefore the expanded exclusion areas would significantly reduce potential noise and vibration effects of the quarry on SWP as compared to the proposed project.

The Hybrid Reduced Production and Footprint Alternative would remove approximately 47.2-acres from the proposed project and preserve approximately 29.9-acres of oak woodland. While the areas retained do not contain special or unique habitat, the biological functions and value provided by these oak woodlands and grasslands would be maintained. Additionally, the biological function and value of the pond on the Pasini Parcel provides will also be retained. This alternative would also maintain all existing recreational trails and function, provide additional/expanded buffers from SWP and from uses to the north, providing for additional visual and acoustical shielding of the quarry from off-site locations, as well as reduce the amount of visual change as a result of mining activities. Overall this alternative would provide for the most reductions in environmental impacts and protections to the surrounding community and uses while maintaining viable mineral and aggregate resource production and conservation.

III. ALTERNATIVES EVALUATION MATRIX:

The attached matrix (Table 1 – Alternative Analysis Matrix) provides a general comparison of the potential benefits and detriments of each alternative in key impact areas in relation to the proposed project. Within the matrix the original level of impact is also identified and if mitigation is still required under the alternative.

IV. FIGURES

Figures A1a and A1b - Reduced Footprint/Conservation Alternative

Figures A2a and A2b –Reduced Production and Reduced Footprint (Hybrid) Alternative

Figure 3 – Syar project modification letter dated March 17, 2015

Table 1 – Alternative Analysis Matrix

Impact Category	Proposed Project	No-project Alternative	Reduced Production Alternative	Reduced Footprint/ Conservation Alternative	Reduced Production and Footprint Alternative
Aesthetics	<p>Would result in the most amount of visual change.</p> <p>LTS</p>	<p>Would result in the least amount of visual change.</p>	<p>Would result in the most amount of visual change. Changes would be identical to the proposed project.</p> <p>LTS</p>	<p>Would result in the least amount of visual changes in the southern portion of the site (i.e. the Pasini parcel) with similar changes in the northern portion of the site (i.e. the State Blue Pit area).</p> <p>LTS</p>	<p>Would result in the least amount of visual changes in the northern portion of the site (i.e. the State Blue Pit area) with similar changes occurring in in the southern portion of the site (i.e. the Pasini parcel area) as compared to the Project. However as seen from SWP there would be a lessening of visual changes.</p> <p>LTS</p>
Air Quality	<p>Would result in the most amount of emissions that could result in significant air quality impacts.</p> <p>LTSM Mitigation required.</p>	<p>Anticipated to result in emissions consistent with past and current operation provided production does not increase over baseline conditions.</p>	<p>Would result in the least amount of emissions that could result in significant air quality impacts.</p> <p>LTSM Mitigation required.</p>	<p>Would result in the most amounts of emissions that could result in significant air quality impacts.</p> <p>LTSM Mitigation required.</p>	<p>Would result in the least amount of emissions that could result in significant air quality impacts.</p> <p>LTSM Mitigation required.</p>
Greenhouse Gas (GHG)	<p>Would result in the most GHG emissions and significant unavoidable and un-mitigatable impacts.</p> <p>SU Mitigation required</p>	<p>Anticipated to result in GHG emissions consistent with past and current operation provided production does not increase over baseline conditions.</p>	<p>Would result in the least amount of GHG emissions.</p> <p>LTSM Mitigation required.</p>	<p>Would result in the most GHG emissions and significant unavoidable and un-mitigatable impacts.</p> <p>SU Mitigation required</p>	<p>Would result in the least amount of GHG emissions.</p> <p>LTSM Mitigation required.</p>

Impact Category	Proposed Project	No-project Alternative	Reduced Production Alternative	Reduced Footprint/ Conservation Alternative	Reduced Production and Footprint Alternative
Hydrology and Water Quality	<p>Would have the greatest potential to increase runoff and sedimentation, and the greatest potential to increase water use.</p> <p>LTSM Mitigation Required</p>	<p>Anticipated to have the least potential to increase runoff and sedimentation and water use consistent with historic use; however water use could increase if production increases above baseline conditions.</p>	<p>Would have the greatest potential to increase runoff and sedimentation similar to the proposed project, and the least potential to increase water use.</p> <p>LTSM Mitigation Required</p>	<p>Would have the least potential to increase runoff and sedimentation and the greatest potential to increase water use.</p> <p>LTSM Mitigation Required</p>	<p>Would have a reduced potential to increase runoff and sedimentation and the least potential to increase water use.</p> <p>LTSM Mitigation Required</p>
Land Use¹	<p>Generally consistent with applicable General Plan Goals and policies.</p> <p>Would further promote goals or policies associated with mineral resource extraction and conservation; such as Policy CON-37 that encourages the identification, improvement, and conservation of mineral and aggregate resources to ensure the long-term production and supply.</p> <p>LTS</p>	<p>Continued consistency with applicable General Plan Goals and policies.</p>	<p>Generally consistent with applicable General Plan Goals and policies.</p> <p>Would further promote goals or policies associated with climate protection and environmental health such as Goal CON-15 and Policies CON-17 and CON-77 that encourage the reduction GHG and other emissions that could impact air quality.</p> <p>LTS</p>	<p>Generally consistent with applicable General Plan Goals and policies.</p> <p>Would further promote goals or policies associated with conservation of natural habitats, oak woodlands such as Policies CON-1 and CON-24, and Community Character Goal CC-4 and Policy CC-19 that encourages the preservation of cultural resources and CC-21 that encourages the preservation rock walls.</p> <p>LTS</p>	<p>Generally consistent with applicable General Plan Goals and policies.</p> <p>Would further promote: mineral resource extraction and conservation policies, such as Policy CON-37; climate protection and environmental health Goals and Policies such as Goal CON-15 and Policies CON-17 and CON-77; conservation of natural habitats and oak woodlands Policies CON-1 and CON-24; the preservation of cultural resources Goal CC-4 and Policies CC-19 and CC-21; and Policy ROS-2 that encourages the maintenance of a high-quality system of parks and trails.</p> <p>LTS</p>

Impact Category	Proposed Project	No-project Alternative	Reduced Production Alternative	Reduced Footprint/ Conservation Alternative	Reduced Production and Footprint Alternative
Mineral Resources	Would result in continued operations into the future to provide a reliable local source of aggregate. LTS	May result in limited future operations that could negatively affect the reliability of locally sourced aggregate.	Anticipated to result in continued future operations to provide a reliable source of aggregate; however reduced annual production limits could affect annual sourcing given demand. LTS	Anticipated to result in continued operations and a reliable local source of aggregate; however, reduced reserves may have an effect on future sourcing. LTS	Anticipated to result in continued operations and a reliable local source of aggregate; however reduced annual production limits could affect annual sourcing given demand and reduced reserves may have an effect on future sourcing. LTS
Noise and Vibration	Would result in the greatest potential noise and vibration effects to surround community and uses. LTSM Mitigation Required	Anticipated to generally result in noise and vibration effects to surround community and uses similar to existing operations.	Would result in the greatest potential noise and vibration effects to surround community and uses; however, on an annual basis they are anticipated to be less than the proposed project. LTSM Mitigation Required	Would result in the greatest potential noise and vibration effects to community and uses to the north and east, and the least amount of effects to the southeastern portions of SWP. LTSM Mitigation Required	Anticipated to result in the least potential for noise and vibration effects to surrounding community and uses however there could be minimal increases in the southeastern portion of SWP. LTSM Mitigation Required
Traffic	Would result in the greatest increase in potential trips to the Quarry. LTSM Mitigation Required	Anticipated to result in potential trips to the Quarry consistent with past and current operation; however trips could increase if production increases from baseline conditions.	Would result in the least increase in potential trips to the Quarry. LTS	Would result in the greatest increase in potential trips to the Quarry. LTSM Mitigation Required	Would result in the least increase in potential trips to the Quarry. LTS

1. While the alternatives would generally result in consistency with applicable General Plan Goals and Policies to varying degrees (see General Plan Consistency Memo), each specific alternative would have the tendency to further promote Goals and Policies within specific elements of the General Plan such as Conservation, Community Character, and Recreation and Open Space. For example, while the reduced production alternative would further promote climate and air quality goals and policies it may not further promote recreation goals and policies (such as maintaining a high-quality park system).

SU = Significant and Unavoidable; LTS = Less Than Significant; LTSM = LTS with Mitigation

This Page Intentionally Left Blank

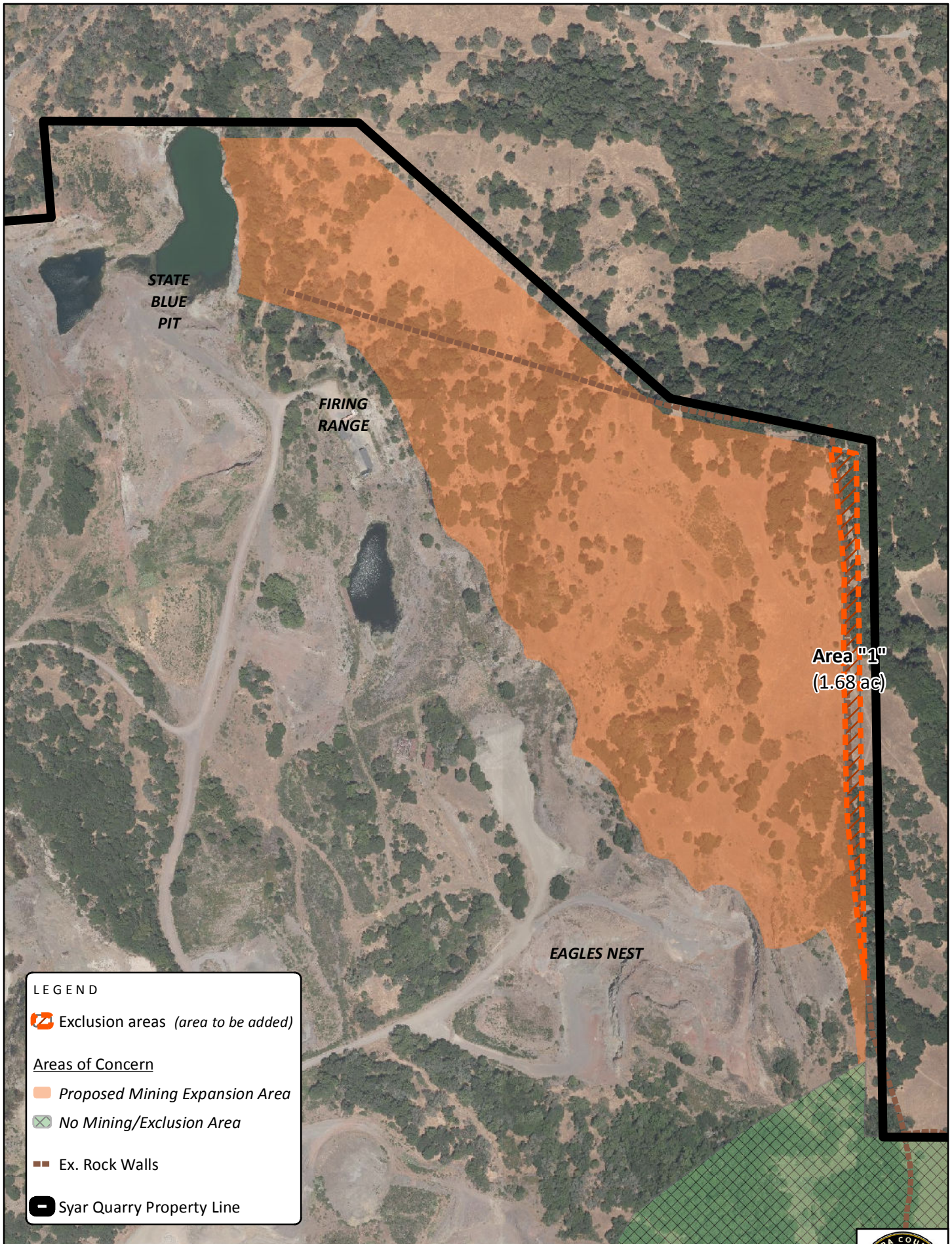


Figure A1a: Reduced Footprint/Conservation Alternative

[2015.07.10] Disclaimer: This map was prepared for informational purposes only. No liability is assumed for the accuracy of the data delineated hereon.

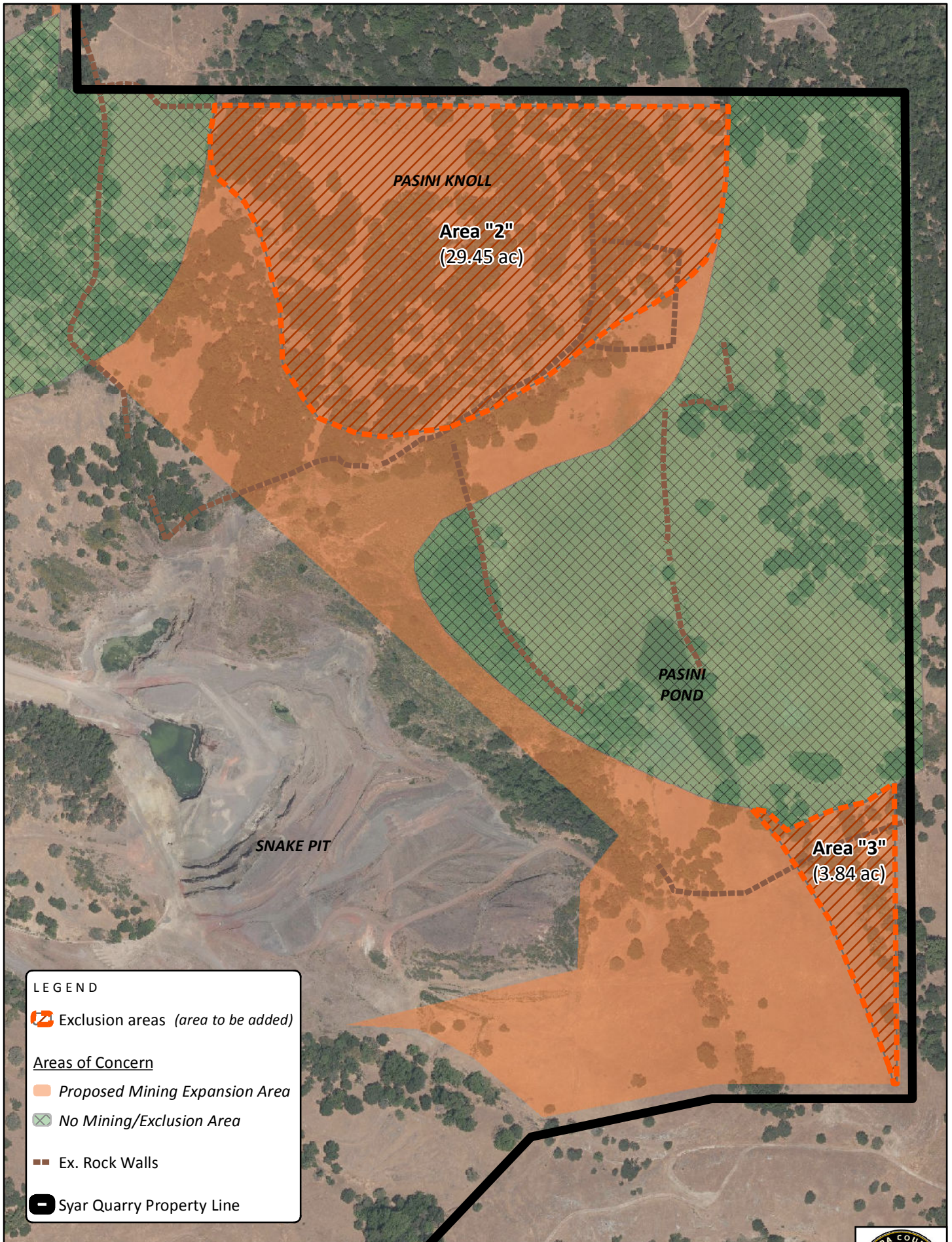


Figure A1b: Reduced Footprint/Conservation Alternative

[2015.07.10] Disclaimer: This map was prepared for informational purposes only. No liability is assumed for the accuracy of the data delineated hereon.

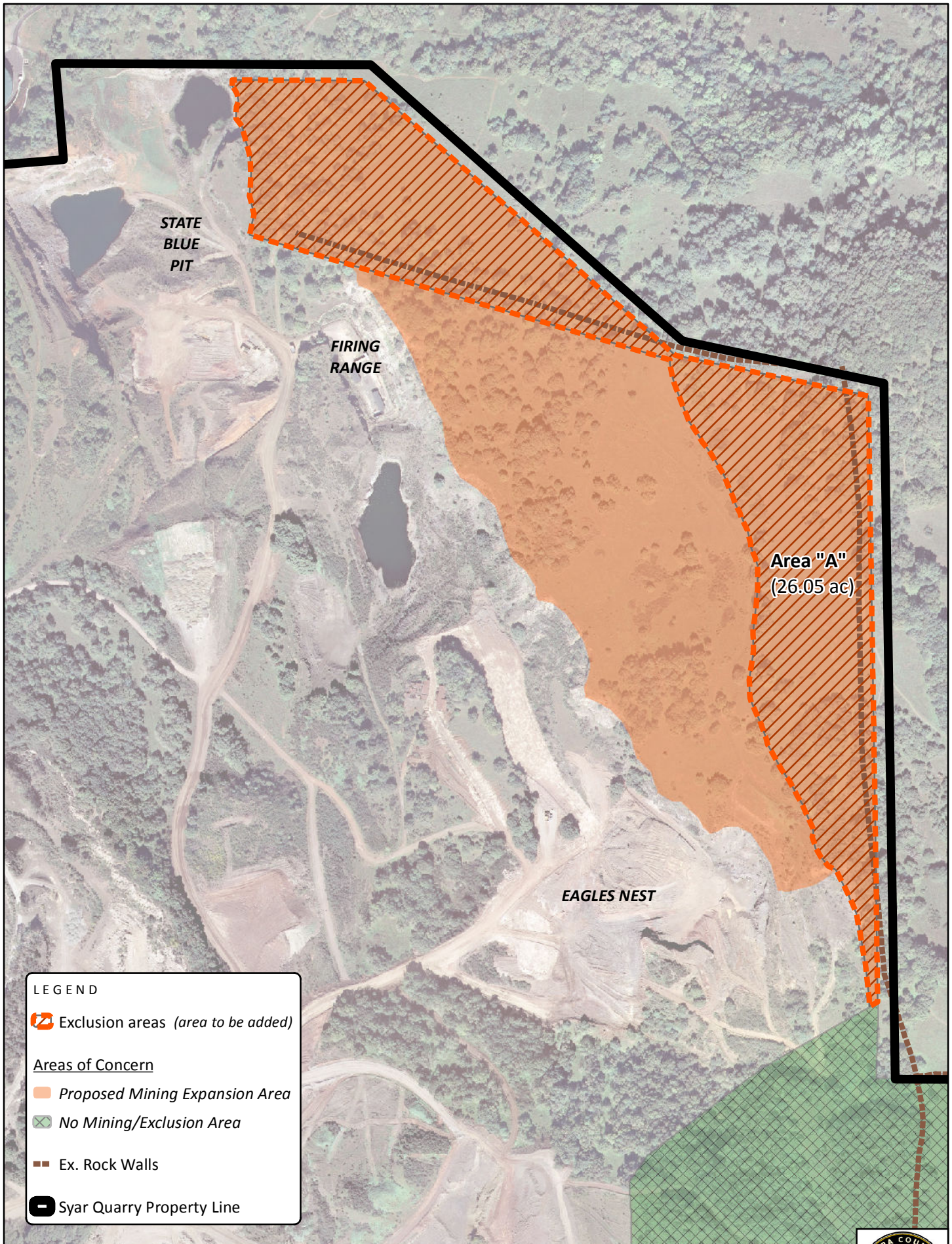


Figure A2a: Reduced Production and Reduced Footprint (Hybrid) Alternative



0 100 200 400 ft.



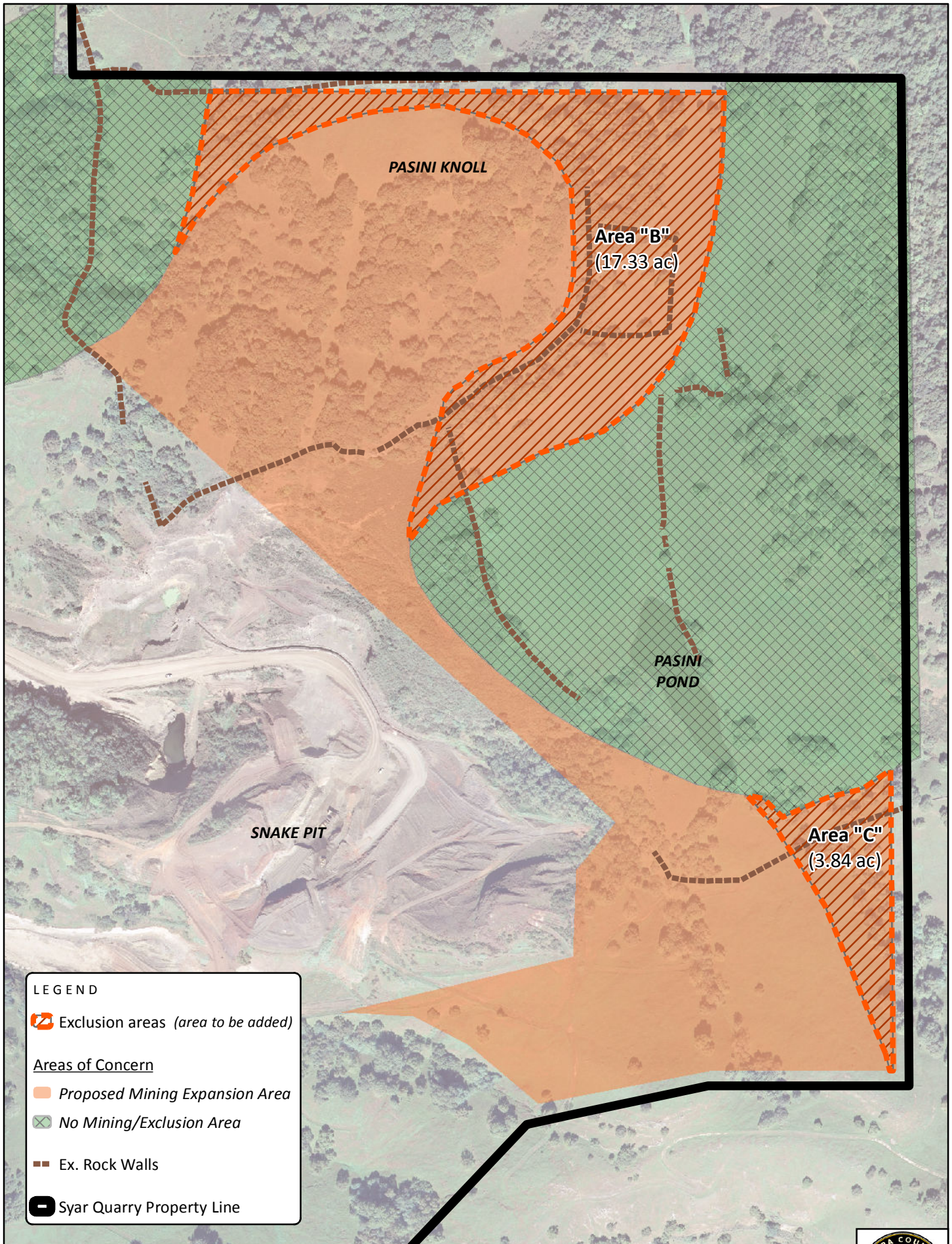


Figure A2b: Reduced Production and Reduced Footprint (Hybrid) Alternative



0 100 200 400 ft.



[2015.07.10] Disclaimer: This map was prepared for informational purposes only. No liability is assumed for the accuracy of the data delineated hereon.

FIGURE 3



SYAR INDUSTRIES, INC.

RECEIVED

MAR 17 2015

Napa County Planning, Building
& Environmental Services

March 17, 2015

Mr. Don Barrella, Planner III
Napa County
Conservation, Development & Planning Department
1195 Third Street, Suite 210
Napa, California 94559

Subject: Syar Industries, Inc. - Napa Quarry Permit

Dear Don:

As you have requested, I am sending this letter to formally request the following modifications be made to the Syar Industries, Inc. (Syar) Napa Quarry Project. We first want to acknowledge that Syar is agreeable to the Reduced Production Alternative being the County's recommendation to the County Planning Commission. Also, as stated in our E-Mail to you on February 13, 2015, Syar is making these modifications to their project in response to the concerns raised at the January 7th Planning Commission hearing on the Napa Quarry Project. These proposed revisions are intended to balance public concerns regarding potential impacts, with the project objectives of providing a local, reliable, affordable, and consistent source of high quality aggregate and aggregate-related materials to customers in the Napa region for the next 35 years. Syar proposes to make the following modifications:

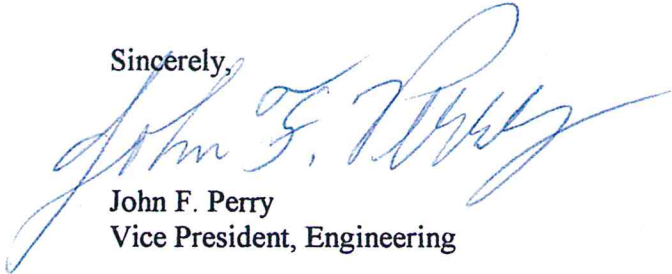
- Reduce the size of the expansion areas as shown on the attached maps. In the Pasini area, this includes doubling the size of the setback from the property line, as shown in Exhibit 1, attached. This would reduce the mineable area by approximately 5 acres. In the northeast area of State Blue, this change consists of removing the northern-most 10 acres of the expansion area, as shown in Exhibit 2. These modifications to the expansion areas should reduce potential noise, vibration, and visual impacts of the project. It also reduces the impacts on oak woodlands, particularly in the northeast area. Along with this modification to Syar's project, Syar is willing to develop a license agreement, with the County of Napa, that will allow the existing trails, currently located on Syar property, to remain.
- We suggest the County clarify Mitigation Measure 4.11-1 to indicate: (1) the mitigations will be applied in both expansion areas, and (2) clearing of topsoil and overburden are limited to the hours of operation stated in Section 3.5.7. As additional mitigation in the expansion areas, we will also: (1) limit blasting to the hours of 10:00 am to 4:00 pm weekdays, with no blasting on Saturdays, Sundays, or holidays, and (2) within 400 feet of the property line, and where such activities are visible from the trails in Skyline Park, limit

topsoil and overburden removal activities to the hours of 7:00 am to noon on weekdays, with no such activities on Saturdays, Sundays, or holidays.

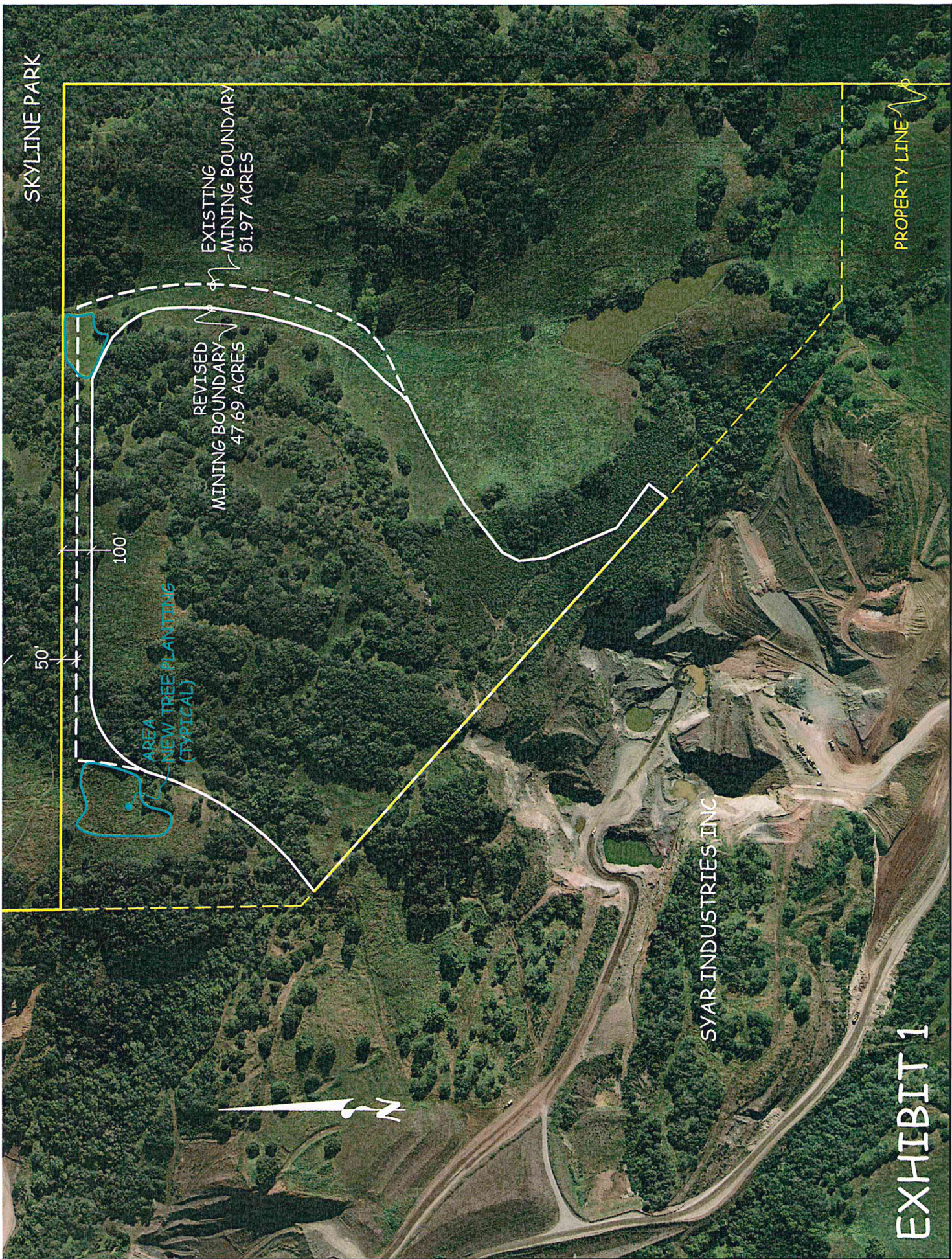
- To provide additional visual screening, Syar will plant oak trees in the setback of the Pasini expansion area, in the general location shown on Exhibit 1, within the first 2 years of the permit term.
- Syar will provide 48 hours notice of blasting via our website, in addition to providing a 48 hour notice via email/phone call to anyone who requests to receive a notice.
- To address the potential dust concerns expressed by Cakebread, we agree to not blast when sustained wind speeds at the quarry exceed 20 mph.

Please let me know if you have any further questions with respect to these changes to the project. You can call me at 707-259-5826 or email me at jperry@syar.com.

Sincerely,



John F. Perry
Vice President, Engineering



SKYLINE PARK

EXISTING
MINING BOUNDARY
51.97 ACRES

REVISED
MINING BOUNDARY
47.69 ACRES

PROPERTY LINE

100'

50'

AREA
NEW TREE PLANTING
(TYPICAL)

SYAR INDUSTRIES, INC

EXHIBIT 1

EXHIBIT 2

SKYLINE PARK

10.7 +/- ACRES

EXISTING
MINING
BOUNDARY

EXISTING
ROCK WALL
&
REVISED
MINING BOUNDARY

50'

SYAR INDUSTRIES INC.

PROPERTY LINE

