3 PROJECT DESCRIPTION

3.1 PROJECT SUMMARY

The proposed project (also referred to as permit amendment) is a request to modify an approved mining permit and reclamation plan for the existing CEMEX sand and gravel mining operation to allow more mining over a longer period of time. The existing off-channel mining operation is operated subject to a 1996 permit approval (as subsequently modified), but has been operating continuously at that location since the 1970s. The operation is identified by the State Department of Conservation, Division of Mining and Reclamation (DMR) as Mine Identification Number 91-57-0008. The subject application (ZF #2018-0015) was received February 28, 2018, and subsequently revised several times. The most recent revision to the project application occurred on November 23, 2022. Project application material can be viewed at:

> https://www.yolocounty.org/government/general-government-departments/county-administrator/county-administrator-divisions/natural-resources/mining-projects-and-permits/cemex-cache-creek-mining-and-reclamation-permit-amendment-application-zf-2018-0015

The operation, as currently approved (Mining Permit No. ZF #95-093 and Development Agreement No. 96-287), is located primarily east of Interstate 505 (I-505), along the south bank of Cache Creek, near the unincorporated community of Madison. The existing off-channel mining operation is operated subject to a 1996 permit approval (as amended),but has been operating continuously at that location since the 1970s. The existing project site is 1,902 acres, with mining currently limited to 586[1] acres and reclamation required for 716 acres (including the 30-acre plant site). The current approvals allow maximum annual mining of 1,445,783 tons (1,200,000 tons sold) and maximum total mining of 32,170,000 tons (26,700,000 tons sold). Mining is allowed to occur in seven phases moving generally from west to east, to a maximum depth of 70 feet, over a 30-year period ending August 2027.

The proposal would amend the approved mining and reclamation permits to: 1) extend the term of the permit approvals by 20 years; 2) allow mining of more total tonnage (22.3 million additional tons mined; 20.0 million additional tons sold); 3) increase the allowed acreage of simultaneous disturbance; 4) increase the allowed area for processing activities; 5) allow reclamation in certain phases to occur later and to allow overall reclamation to occur later; 6) remove Phase 7 from the operation; 7) address inconsistencies in approved plans verses on-the-ground conditions; 8) modify phase boundaries; 9) modify reclamation plans to reclaim more area and modify reclamation end uses to decrease the area of reclaimed agriculture and increase the area of

[1] The 1996 EIR refers to a 598-acre mining area. The executed Development Agreement refers to a 586-acre mining area. Neither of these acreages includes the 100-acre Hutson parcel (for which mining was concluded but reclamation would occur) or the 30-acre plant site (which was amended into the plans in 2003). This Draft SEIR relies on acreages as described in the executed Development Agreement. Since the 1996 EIR examined impacts associated with slightly different but overall higher total acreage, this approach is more conservative; moreover since the executed Development Agreement governs project operation this approach is defensible.

reclaimed lake; 10) increase the area of reclaimed habitat; and 11) modify other approvals to be consistent with the request.

As related specifically to reclamation end uses, Table 3-1 below provides a general comparison of the requested changes:

Table 3-1: Summary of Proposed Changes to Reclamation End Uses

Reclaimed End Uses (acres)	Agriculture	Habitat	Lake	Slopes / Roads / Buffers	Total
Approved	476.0[1]	61.0[5] (on plan sheets) 166.0 (in HRP)	153.0[6]	26.0	716.0[2]
Proposed	418.6	174.0	204.0	19.2	815.8[4]
Difference (% change)	-57.4 (-12%)	113.0[5] (+185%)[5] (on plan sheets) +8.0 (+5%) (in HRP)	51.0 (+33%)	-6.8 (-26.2%)	99.8[3] (+14%)

Notes:
[1] 1996 Development Agreement, as amended. Includes 30-acre plant site and 100-acre Hutson parcel (Phase 1).
[2] Includes 30-acre plant site and 100-acre Hutson parcel (Phase 1).
[3] Disturbed area along entire northern boundary of approved mining adjoining creek bank and I-505 buffer area. Reflected generally in Figure 3-9, Mining and Reclamation Comparison, as approximately 89 acres (119 ac. – 30 ac. plant site). Discrepancy (89 ac. vs. 99.8 ac.) attributable to improved mapping accuracy over time and proposed elimination of Phase 7 area from proposed operation.
[4] This number reflects the elimination of Phase 7.
[5] Approved reclamation plans include 61 acres of habitat; approved Habitat Restoration Plan (HRP) includes 166 acres of habitat. This difference is resolved with the proposed project which would incorporate all acreage requiring reclamation into the approved reclamation plans. The proposed reclamation plans and proposed HRP both include 174 acres of habitat. This reflects an actual increase of 8.0 acres (5%) of habitat.
[6] The Development Agreement references 153 acres for the total size of the four lakes. Based on digitization, the actual acreage is approximately 146 acres.

3.2 PROJECT LOCATION AND SETTING

The project site is located at 30288 State Route (SR) 16, Woodland, California 95653, in the central portion of unincorporated Yolo County (Figure 3-1, Location Map) near the town of Madison, approximately seven miles west of the city of Woodland. The excavation area, processing plant, and office are currently accessed from an existing driveway entrance on the north side of SR-16. The site is predominantly located east of I-505 but includes one parcel (Mining Phase 7) immediately west of I-505 (Figure 3-2, Site Plan). Phase 7 is proposed to be eliminated as a component of the project. The Phase 7 area has not been disturbed by mining operations. The site consists of 12 adjacent assessor parcel numbers. Other information related to ownership, County zoning and County General Plan land use designations is shown in Table 3-2, below.

Figure 3-1
Location Map

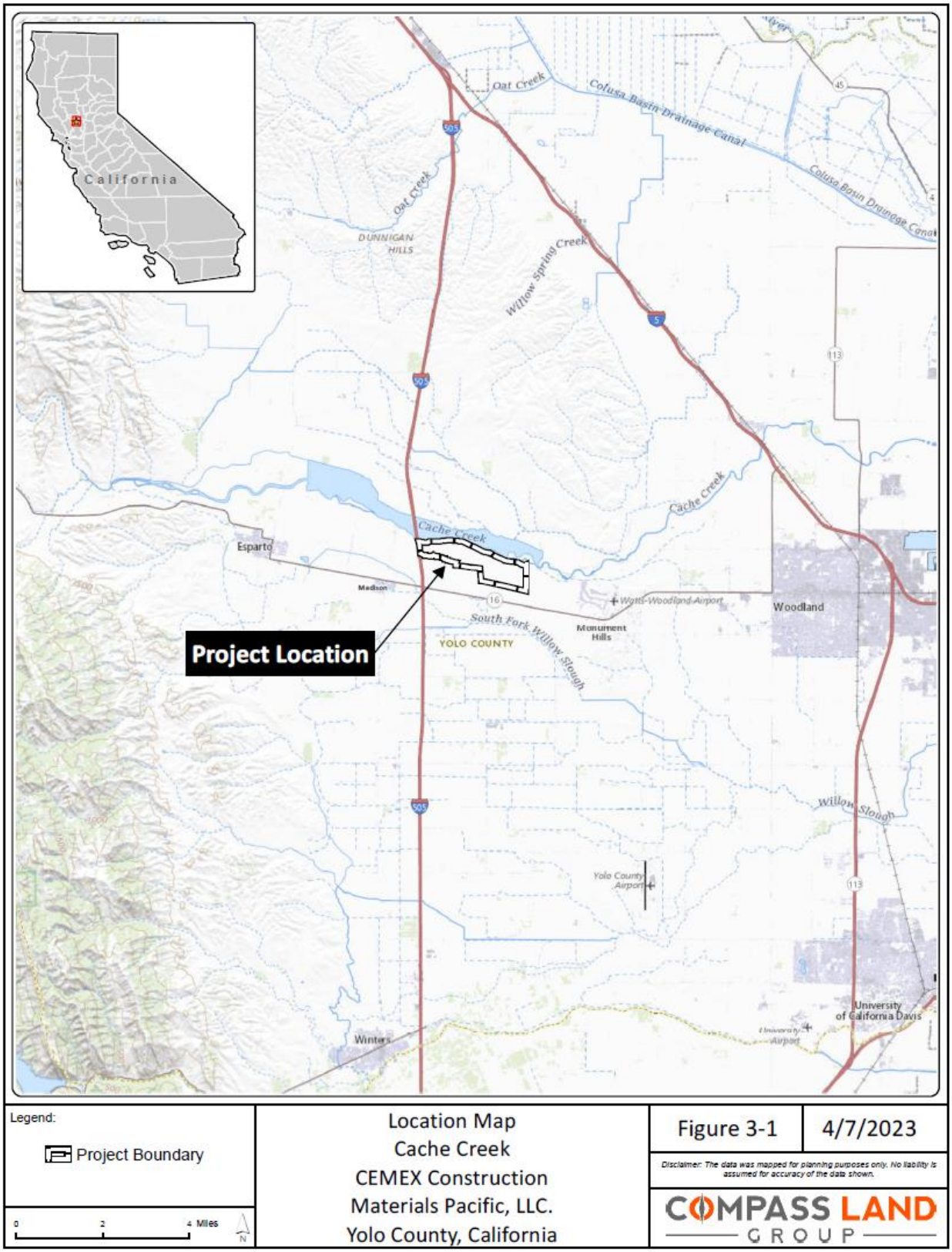

Figure 3-2
Site Plan

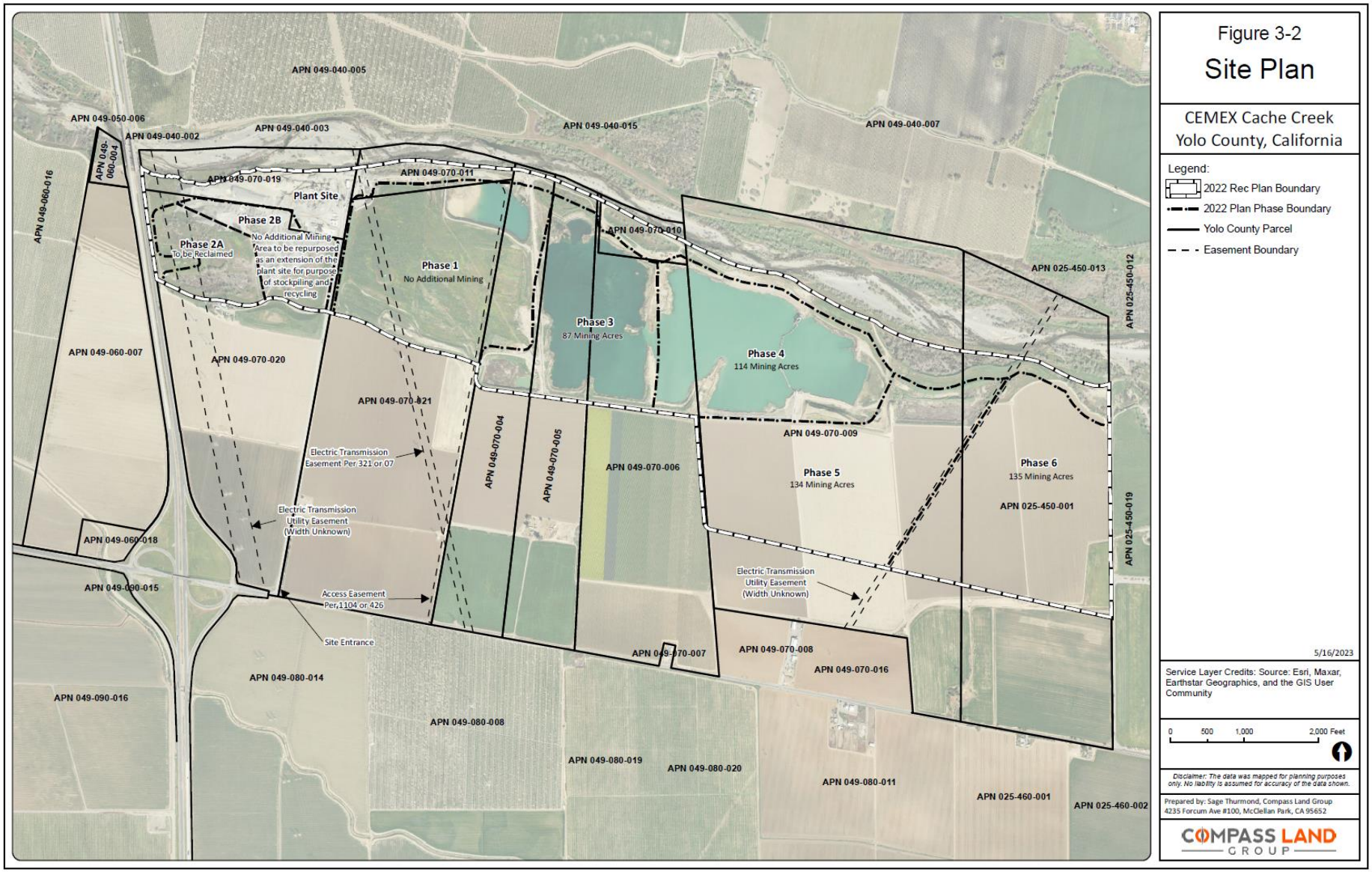

Table 3-2: Assessor Parcels, Ownership, Zoning, and General Plan Designations

APN (Proposed Phase)	Assessor Acres[1]	Surveyed Acres[2]	Ownership[3]	Zoning[4]	General Plan[5]
025-450-001 (portion of Ph 6)	291.1	280.0	United Metro Materials Inc.	A-N (SG) POS (SG) A-N	AG (MRO) OS (MRO)
049-060-004 (portion of Ph 7)	6.3	6.3	Solano Concrete Co., Inc	A-N (SG) POS (SG)	AG (MRO) OS (MRO)
049-060-007 (portions of Ph 7)	142.8	142.4	Solano Concrete Co., Inc.	A-N (SG) A-N	AG (MRO)
049-070-004 (portions of Ph 1, 3)	112.7	110.7	United Metro Materials Inc.	A-N (SG) POS (SG) A-N	AG (MRO) OS (MRO)
049-070-005 (portion of Ph 3)	98.5	112.8	United Metro Materials Inc.	A-N (SG) POS (SG) A-N	AG (MRO) OS (MRO)
049-070-006 (portions of Ph 3, 4, 5)	200.2	200.1	United Metro Materials Inc.	A-N (SG) POS (SG) A-N	AG (MRO) OS (MRO)
049-070-009 (portions of Ph 4, 5, 6)	444.0	461.6	United Metro Materials Inc.	A-N (SG) POS (SG) A-N	AG (MRO) OS (MRO)
049-070-010 (portions of Ph 3, 4)	17.1	17.1	Solano Concrete Co., Inc.	A-N (SG) POS (SG)	AG (MRO) OS (MRO)
049-070-011 (portions of Ph 1 and plant site)	26.2	26.5	Solano Concrete Co., Inc.	A-N (SG) POS (SG)	AG (MRO) OS (MRO)
049-070-019 (portion of plant site)	53.9	48.0	Solano Concrete Co., Inc.	A-N (SG) POS (OS)	AG (MRO) OS (MRO)
049-070-020 (portions of Ph 2 and plant site)	212.2	218.5	United Metro Materials Inc.	A-N (SG) A-N	AG (MRO)
049-070-021 (portions of Ph 1 and plant site)	276.4	278.3	Solano Concrete Co., Inc.	A-N (SG) A-N	AG (MRO)
Total:	1,881.4	1902.3			

Notes:
[1] Source: Yolo County Assessor, accessed November 28, 2017. Note the total of these acreages (1,881.4 acres) does not match the total of 1,828 acres from the 1996 EIR. Discrepancy attributable to improved mapping accuracy over time.
[2] Source: Record of Survey, filed January 12, 2018, in 2018 Book of Maps at pages 2-4.
[3] United Metro Materials Inc. and Solano Concrete Co., Inc. are fully-owned subsidiaries of CEMEX.
[4] A-N = Agricultural Intensive. Sand and Gravel (SG) overlay zone applied in 1996 to areas approved for mining.
[5] Source: 2030 Countywide General Plan, with verification thru Yolo County GIS Public Viewer.
AG = Agriculture. OS = Open Space. The Open Space land use designation applies to the portions of the parcels associated with Cache Creek.

The project site is located within the boundaries of the Cache Creek Area Plan (CCAP) adopted by the Board of Supervisors in 1996, as amended in December 2019 (CCAP Update). The CCAP Update was evaluated in the CCAP Update FEIR (SCH #2017052069) certified in December 2019. The CCAP incorporates the Off-Channel Mining Plan for Lower Cache Creek (OCMP)[2] and the Cache Creek Resources Management Plan (CCRMP).[3] The CCRMP and OCMP are adopted components of the County General Plan, and are implemented primarily through the County's Mining Ordinance, Reclamation Ordinance, and In-Channel Ordinance.

The General Plan and Zoning designations on the project site are identified in Table 3-2 above. The General Plan land use designation of Agriculture (AG) supports surface mining (General Plan Table LU-4 and associated policies). The General Plan Mineral Resource Overlay (MRO) identifies areas within the CCAP area that have been identified by the state (State designated Mineral Resource Zone 2 or MRZ-2 areas) as containing known significant deposits of aggregate, and existing mining operations. Per County Code, all areas approved for mining must have this designation. The in-channel portions of the site where Cache Creek crosses the property are designated in the General Plan as Open Space (OS) and fall under the management of the CCRMP (General Plan, p. CO-13). The County zoning designation of Agricultural-Intensive (A-N) allows surface mining when combined with the Sand and Gravel Overlay (S-G), and subject to approval of a Major Use Permit. The existing mining operation received all required land use designations, zoning, and approvals in 1996.

The project site is located in the southern portion of a relatively flat and wide alluvial valley known as Hungry Hollow. The local topography consists of a broad alluvial plain formed at the base of the eastern flank of the California Coast Range. The alluvial valley is oriented northwest to southeast. Cache Creek transects the valley, flowing generally from west to east.

Land uses on the site consist primarily of mining and agricultural land in various stages of mining and reclamation. Agricultural production on and around the site are mainly row crops. Annual grassland with sections of ruderal vegetation is found around the perimeter of the agricultural and actively mined areas as well as in much of the required minimum 200-foot buffer from the bank of Cache Creek. Remnant sections of riparian habitat (riparian depressions) also fall within the 200-foot Cache Creek buffer. There is a narrow band of riparian vegetation on the southern bank of Cache Creek (north side of the project site) which serves as a natural vegetative buffer between mining and the creek. The creek is approximately 35 feet lower in elevation at this point. This area is undisturbed and does not fall within the mining or reclamation plan boundaries.

The predominant land uses in the vicinity of the Project include aggregate mining and processing, agriculture, and open space associated with Cache Creek. To the north, the site is bound by Cache Creek and agricultural lands further north. To the east, the site is bound by agriculture, including various uses allowed within that zone such as farm dwellings and ancillary commercial-type uses. To the south, the site is bound by SR-16, agriculture, and occasional farm dwellings.

[2] Yolo County. 2019. Updated Final Off-Channel Mining Plan (OCMP) for Lower Cache Creek, adopted July 30, 1996 and Updated December 17, 2019.

[3] Yolo County. 2019. Updated Final Cache Creek Resource Management Plan (CCRMP). Adopted July 30, 1996 and Updated December 17, 2019.

To the west, the site is bound generally by I-505. The exception is Phase 7 which is located west of I-505 and is bound to the west by agriculture and rural residences. As a component of the proposed project, the applicant has proposed to eliminate Phase 7.

3.3 PROJECT OBJECTIVES

The objectives of the applicant are as follows:

1. To continue extraction of sand and gravel resources at the approved annual rate of production for the processing and sale of aggregate products through 2047.

2. To maximize the extraction of the remaining available sand and gravel resources located within the permitted mining footprint.

3. To increase total tons sold over the 20-year extended life of the permit by 20 million tons.

4. To continue to supply an economic and reliable source of construction materials to the Yolo County market, utilizing the existing aggregate processing facility, conveyor system, and associated infrastructure.

5. To establish a new settling pond for deposition of process fines.

6. To use the eastern 31.9 acres of the existing Phase 2 area as an extension of the existing processing plant site for purposes of product stockpiling and construction materials recycling.

7. To implement the proposed reclamation plan to establish end uses of agriculture, permanent lakes, and wildlife habitat in accordance with the Surface Mining and Reclamation Act (PRC 2710, et seq.) and CCAP.

8. To continue to employ approximately 15 mining and processing personnel at the site.

9. To resolve outstanding operational concerns identified by the County.

3.4 PROJECT JUSTIFICATION

The applicant has provided the following justification for the project:

> The project is an extension and modification of an approved project. The project is consistent with the State Legislature and County's recognition that the extraction of minerals is essential to the continued economic well-being of the State, County and to the needs of society (as codified in PRC Section 2711(a) and Section 10-4.103 of the County Mining Ordinance. As published in the California Department of Conservation's "Map Sheet 52, Aggregate Sustainability in California" (2018), aggregate construction materials are essential to modern society, both to maintain the existing infrastructure and to provide for new construction. Specific to the Sacramento-Fairfield production consumption region, within which Yolo County lies, the State projected that only 37 percent of a projected 50-year aggregate demand of 295

million tons is currently permitted. This 50-year demand reflects a 50 percent increase as compared to the State's previous estimate of 196 million tons in the 2012 version of Map Sheet 52 report.

The CEMEX operation is a regionally important source of high-quality construction aggregate material that has helped serve the building and infrastructure needs of Yolo County and the Sacramento-Fairfield production consumption region for over 40 years. The State Department of Conservation has identified the project site as being in the MRZ-2 zone, meaning that significant mineral deposits are present or that a high likelihood for their presence exists.

This project will ensure the continued supply of construction materials and associated jobs for the region while providing for current reclamation standards to be achieved. Further, maintaining a local source of construction materials will minimize the economic and environmental costs (e.g., increased construction cost, fuel consumption, greenhouse gas emissions, and traffic congestion) associated with transporting aggregate from distant sources. In addition, promoting the continued use of the existing electric dredge in an efficient manner is environmentally superior to the former wet-excavation method of using a diesel-powered dragline.

The project is consistent with the existing zoning and General Plan designations for the site and includes a reclamation plan to return mined lands to a useable condition that includes agriculture, permanent lakes, and wildlife habitat. The project is consistent with the CCAP, Mining Ordinance, and Reclamation Ordinance.

3.5 PROJECT BACKGROUND AND HISTORY

Aggregate mining in Yolo County has occurred in and along Cache Creek since the early 1900s. Through the mid-1990s, the extraction of sand and gravel resources in Yolo County occurred primarily within the Cache Creek channel. Since 1996, due to environmental concerns, commercial mining has been prohibited from occurring in-channel[4], and has been limited to off-channel locations outside of the active floodplain.

The CEMEX facility is a regionally important source of high-quality construction aggregate material that has helped serve the building and infrastructure needs of Yolo County and the Sacramento-Fairfield production consumption region for over 40 years. The State Department of Conservation has designated the project site Mineral Resource Zone (MRZ) 2, reflecting the known presence of significant mineral deposits.

Prior to any surface mining disturbances, the project site was predominantly used for agriculture. The subject operation was originally developed by Solano Concrete Company, Inc. (Solano) and has been continuously mined since 1971. In 1999, Solano's assets were acquired by Kiewit Corporation, which were later acquired by Rinker Materials in 2002. In 2008, CEMEX acquired

[4] Limited exceptions for in-channel maintenance are allowed under the County's In-Channel Mining Ordinance.

Rinker's assets and became the current owner and operator of the site. The following is a summary of relevant approvals, modifications, and compliance-related communications:

1971 In-Channel Mining Approval – Solano began gravel extraction and processing in the project vicinity in 1971 following County approval of ZF #1541 (Planning Commission, February 16, 1971), which allowed for aggregate extraction as well as the establishment of an off-channel processing plant that remains in operation.

1972 In-Channel and Asphalt Plant Approval – In 1972, the County approved ZF #1901 (Planning Commission, January 18, 1972) to allow for the addition of an asphalt batch plant. In 1992, the County approved ZF #ZA736 (Planning Commission, April 15, 1992), amending ZF #1901 to allow for the addition of storage silos to the existing asphalt batch plant. From approximately 1971 to 1980, Solano mined and processed aggregates extracted from the Cache Creek channel pursuant to ZF #1541 and ZF #1901.

1978 Off-Channel Approval – In 1978, Solano applied for its first off-channel mining permit to excavate gravel from the terrace deposits south of the Cache Creek channel. Later that year, following preparation of an Environmental Impact Report (EIR), the County approved Mining Permit and Reclamation Plan No. ZF #2859 (Planning Commission, August 16, 1978) to allow for off-channel mining and reclamation on 100-acres, with reclamation to row-crop production on property referred to as the "Hutson parcel" (currently a portion of Phase I to be reclaimed under existing entitlements). Mining of the 100-acre off-channel Hutson parcel was ultimately completed in 1995 and the parcel was substantially reclaimed to agriculture. Row crop farming occurred through 2016 at which point the operator placed additional A-, B-, and C-horizon soils and farming ceased. The parcel has remained fallow until recently. Agricultural leveling of the field occurred in Summer of 2022 and crops were planted in December 2022. Final reclamation sign-off will occur as a part of completion of reclamation under the current active mining and reclamation permit (ZF #95-093).

1980 In-Channel Approval – In 1979, shortly after County approval of Mining and Reclamation Permit ZF #2859 allowing for off-channel mining on the Hutson parcel, the County adopted the In-Channel Interim Mining Regulations (1979 Regulations) that regulated the removal of aggregates from the channel of Cache Creek. In 1980, following preparation of an EIR evaluating in-channel mining impacts, the County approved Use Permit ZF #G-2 (Planning Commission, October 29, 1980) to allow for the continuation of in-channel mining on 266 acres with reclamation to a streamway. Operation of the then existing Solano aggregate processing plant was not affected by the issuance of ZF #G-2. Solano continued in-channel mining from approximately 1980 to 1995 pursuant to this permit, but less frequently and less intensively than had occurred in years prior.

1995 Short-Term Off-Channel Approval – In 1994, the County Board of Supervisors adopted Resolution No. 94-73, adopting a conceptual framework of goals and objectives for the development of the OCMP and CCRMP, including the Off-Channel Surface Mining Ordinance (Mining Ordinance) to be contained in the OCMP. The OCMP and CCRMP were resolved to be developed in recognition of the need to accommodate a shift in emphasis from in-channel to off-

channel mining. The Board of Supervisors also adopted County Resolution No. 94-82 to allow processing of short-term off-channel mining applications during the period of development of the OCMP.

Meeting the eligibility criteria to file a short-term permit application pursuant to County Resolution No. 94-82, Solano submitted application for an off-channel mining project on the "Farnham West parcel" (currently the eastern portion of Phase 1 to be reclaimed under existing entitlements). In 1995, following preparation of an EIR, the County approved Mining Permit and Reclamation Plan No. ZF #94-065 (Board of Supervisors, September 5, 1995) to allow for short-term, off-channel mining on 35 acres over a three-year period with reclamation to agricultural row-crop production as well as continued operation of the processing and batch plants. This permit also included an amendment to ZF #2859 to expand the area reclaimed to row-crop production. Mining of the Farnham West parcel was completed in approximately 1996 and the parcel was substantially reclaimed to agriculture. Row crop farming occurred through 2016 at which point the operator placed additional A-, B-, and C-horizon soils and farming ceased. The parcel has remained fallow until recently. Agricultural leveling of the field occurred in Summer of 2022 and crops were planted in December 2022. Final reclamation is a component of the current active mining and reclamation permit (ZF #95-093).

1996 Long-Term Off-Channel Approval – In 1995, in parallel with the County's development of the OCMP and CCRMP, Solano submitted a long-term mining permit application which ultimately formed the basis for the overall footprint of the existing Cache Creek mine. In 1996, following preparation of a project EIR (1996 EIR)[5] that tiered off of the program-level EIRs for the OCMP and CCRMP, the County approved Long-Term Off-Channel Mining and Reclamation Permit No. ZF #95-093 and Development Agreement No. 96-287 (Board of Supervisors, November 25, 1996) to allow off-channel mining on ±586 acres over a 30-year period with reclamation of ±686[6] acres[7] to permanent lakes, habitat, tree-crop production, row-crop production, slopes, and roads.

As part of these approvals, the County rescinded the prior Mining and Reclamation Permit Nos. ZF #2859 and ZF #94-065 for the Hutson parcel and Farnham West parcels, respectively. Solano also relinquished its rights for aggregate extraction within the active channel of Cache Creek upon commencement of mining under the new off-channel entitlements.

Prior vested approvals for various plant facilities remained intact (November 13, 1996, Planning Commission Staff Report, "Status of Processing Plant", page 16, and Condition #1 of Board of Supervisors Minute Order No. 01-126, approved April 22, 2001); however, Conditions 12, 14, 19, and Development Agreement Section 2.2-10 (Cessation and Reclamation of Plant/Facilities Sites) require the plants to cease operation and the plant site to be reclaimed in accordance with

[5] Yolo County, 1996, Final Environmental Impact Report for Solano Long-term Off-Channel Mining Permit Application SCH #96012034, (combined DEIR and Responses to Comments documents).

[6] At the time this acreage did not include the 30-acre plant site.

[7] The 100-acre difference in the total area approved for mining and total area approved for reclamation is attributable to the 100-acre portion of Phase 1 (the "Hutson parcel") where mining was completed in 1995 but had not yet been reclaimed to agriculture. As part of the approval of ZF #95-093 in 1996, the County rescinded the mining rights for the 100-acre Hutson parcel because mining was completed, and merged the reclamation requirements into the 1996 approval.

the CCAP[8] at the end of the permit period, unless additional mining approvals are subsequently granted by the County.

At this time, the plant facilities include the following:

- Aggregate Processing – The aggregate processing plant, consisting of equipment for crushing, screening, washing, and sorting, was permitted in 1971 (ZF #1541).

- Asphalt Concrete – The batch plant was permitted in 1972 (ZF #1901) and the storage silos were permitted 1992 (ZF #ZA736). The asphalt facilities are operated by Vulcan under lease to CEMEX.

- Ready-Mix Concrete – The plant moved from Madison in 2001 pursuant to an amendment to the Development Agreement (ZF #2000-087). The concrete plant is operated by the Ready-Mix Division of CEMEX.

Shortly thereafter, the County issued Flood Hazard Development Permit ZF #96-070 (Director approval, December 16, 1996) in accordance with Section 8-3.401 of County Code that requires a permit for activity (i.e., the approved off-channel mining permits) in the FEMA Flood Zone "A" designation.

1998 Minor Modification – In 1998, the County approved a minor amendment to Long-Term Off-Channel Mining Permit No. ZF #95-093 (Board of Supervisors, June 16, 1998) to modify Condition of Approval No. 66 to allow for an extension of time to construct required road improvements.

2001 Permit Amendment – In 2001, the County approved amendment ZF #2000-087 (Board of Supervisors, May 22, 2001), to allow for relocation of a concrete batch plant from its previous location in the town of Madison to the existing on-site aggregate processing facility located north of Phase 2. This action included a Lot Line Adjustment that moved the concrete batch plant portion of the Phase 2 parcel to the Plant Site parcel.

2003 Permit Amendment – In 2003, the County approved amendment ZF #2002-127 (Board of Supervisors, April 15, 2003) to rename and reverse the order of Phases 4 and 6. Then Phase 4 was renumbered to Phase 6, and then Phase 6 was renumbered to Phase 4. This allowed mining to proceed south before it proceeded east (as depicted in Attachment E of the 2003 action).

2014 Minor Modification – In 2014, the County approved ZF #2013-0003 (Director approval, March 12, 2014) as a minor modification to the reclamation plan for ZF #95-093 to clarify the reclamation boundary and end use of the aggregate processing plant site. The 2014 approval identified agriculture as the end use for the plant site and incorporated the plant site area into the overall reclamation plan as a minor modification to the original reclamation plan. All regulatory requirements, permit terms, conditions of approval, and development agreement commitments continued to apply, unchanged. This increased the total area of reclamation under the current

[8] The 2014 Minor Modification (summarized below) resulted in a change to the approved reclamation plan to specifically integrate reclamation of the plant site to agricultural uses.

permit from ±686 acres to ±716 acres (assuming ±30 acres for the plant site area). This action was necessary in response to the September 5, 2012, California Department of Conservation "Lead Agency Review" of Yolo County and resulted in the State combining the plant site with the rest of the operation, into one state mine identification number.

2014 Notice of Violation – On May 30, 2014, the County issued a Notice of Violation to CEMEX for deviating from the spatial pattern of mining as shown on the approved mining plan (ZF #95-093). Staff determined that mining was being undertaken in one contiguous wet pit instead of in several individual pits as per the approved mining plan. On August 15, 2014, the County issued CEMEX a Correction Plan, which outlined steps to bring the operation into compliance and to remove the violation. The Correction Plan required CEMEX to submit an application for a Minor Modification pursuant to Off-Channel Surface Mining Ordinance Section 10-4.604. On September 15, 2014, CEMEX submitted the application for a Minor Modification, including a detailed summary and exhibits of their then-current mining activities.

2015 Minor Modification – In 2015, the County approved ZF #2014-0039 (Intergovernmental Relations Manager approval, May 13, 2015) as a minor modification to the mining plan for ZF #95-093 to resolve the 2014 Notice of Violation. In approving this modification, the County determined that CEMEX could continue mining with the existing dredge in the current configuration in the open phases without impacts to public health and safety, or slope stability.[9] The minor modification stipulates that CEMEX will not mine the alluvial separators between Phases 5 and 6, and will not carry out wet mining in (then) Phase 5 (now Phase 6 based on the May 10, 2022, minor modification approval described below) until it demonstrates that the alluvial separators between Phases 3 and 4 have been re-established.

2016 County Inspection Follow-up – During a County staff inspection on December 5, 2016, as part of the required annual reporting, staff identified in a letter dated December 23, 2016, a number of operational concerns related to: 1) fencing; 2) location of stockpiles within 200-foot setback and need for erosion control seed cover; 3) stockpile signage; 4) analysis of stockpiles for residual pesticides and herbicides; 5) height of stockpiles exceeds 40 feet; 6) steepness of wet pit slopes; 7) steepness of dry mining slopes; 8) excavation beyond approved mining area north of Phases 3 and 4; 9) erosion of backfill along north side of Orrick Pit 2; and 10) ongoing mining in Phase 2 and use of site as extension of plant site.

In a response dated January 11, 2017, the applicant committed to a series of actions to resolve each item. Regarding item 10, CEMEX had partially mined Phase 2, just south of the plant site, and was using a portion of the pit for storage of partially processed material (i.e., pea gravel). The phasing plan described in the 1996 FEIR called for Phase 2 to be completely mined and then reclaimed to agriculture prior to mining in subsequent phases. CEMEX requested, and County staff agreed, to resolve this inconsistency in phasing and use of the Phase 2 pit via the subject

[9] In explanation of the activities that resulted in the 2014 Notice of Violation, at the time of permit approval in 1996, the prior operator (Solano) operated using scrapers, dozers, draglines, and excavators. However, in 2005, Rinker Materials (Solano's successor and the operator at the time), implemented the use of an electric floating dredge. The dredge requires a continuous pond to move from one area to the next; therefore, the alluvial separators between the individual pits had been mined (inconsistent with the approved mining plan) to allow for operation of the dredge.

proposed permit amendment. Since that time, no further mining has occurred in Phase 2. The applicant proposes to use the eastern 31.9 acres of Phase 2 for product stockpiling and construction materials recycling. This is described further later in this chapter.

2017 Stipulated Order to Comply – On June 2, 2017, CEMEX and Yolo County executed a Stipulated Order to Comply (Order). This 2017 Order resulted from a County determination of the California Surface Mining and Reclamation Act (SMARA) violations on the site.

Two compliance issues were identified in the 2017 Order: 1) CEMEX mined beyond the approved limits at several locations along the northern boundary (i.e., north of Phase 3 (Orrick Pit 2) and north of Phase 4 (Snyder West)); and 2) the backfill along the north side of Orrick Pit 2 in Phase 3 experienced pit side slope erosion and failure, resulting in drainage into the pit. CEMEX remedied item #1 by undertaking a property survey in January 2018 to install grade stakes in areas that may have been overmined and placing backfill on the north side of Phases 3 and 4 where any encroachments onto the 200-foot Cache Creek setback had occurred. The County signed off on this in July 2018. For other areas that were overmined outside the 200-foot Cache Creek setback, CEMEX was required to submit an application for a formal amendment to its mining and reclamation plans to incorporate these areas. A component of the subject request is to modify the mining and reclamation plans accordingly.

Regarding item #2, the County requested that CEMEX: 1) implement drainage improvements to prevent further erosion and cracking; 2) contour the pit slopes to a 2:1 ratio; and 3) set forth a proposal and timeline to bring the failed areas into conformance with the approved permit. In 2018, the pit side slope and surrounding area were partially regraded to correct the pit-side erosion. In 2019, with County permission, CEMEX installed a rock-swale inlet to allow stormwater water to flow into the riparian depression north of the pit, to further reduce the potential for pit side slope erosion. In 2020, CEMEX re-leveled the upland area between the pit and riparian depression to ensure positive drainage to the rock swale. These installations were verified by the County during the required annual mine inspection.

In November of 2018,[10] the County determined that the CEMEX facility was in substantial compliance with SMARA, the Off-Channel Mining Plan, and Development Agreement No. 96-287 based on resolution of the items described above, and submittal of an application to modify the approved mining and reclamation plans to reflect proposed and corrected conditions. The application for the subject proposed project was submitted in February 2018 and, along with other requests of the operator, is analyzed in this Draft SEIR.

2022 Conditions of Concern – In a letter dated April 7, 2022, the County identified three conditions of concern related to the 1996 EIR and related California Endangered Species Act Memorandum of Understanding and Management Authorization (CESA No. 2081-1997-048-2; 2081 MOU) and Conservation easement: 1) Temporary loss of agricultural production in excess of EIR assumptions; 2) gaps in implementation of the; 2081 MOU; and 3) gaps in implementation of the

[10] County of Yolo, 2018. Planning Commission Staff Report for Meeting on November 8, 2018.

2012 easement. The applicant has agreed to several actions that will be monitoring by the County to resolve these matters.

In a letter dated April 22, 2022, the County identified a number of new and continuing operational compliance concerns related to: 1) fencing; 2) record of survey to confirm 200-foot setback; and 3) stockpile signage. The applicant is coordinating with the County to resolve items 1 and 2. CEMEX completed installation of the stockpile signage on June 10, 2022.

2022 Minor Modification – On May 10, 2022, the County approved, by action of the Director, ZF #2022-0037, the following actions and minor changes to the permit: 1) put 110 acres in Phase 1 into productive agriculture; 2) place 50 acres of unmined land south of the Hutson Parcel into permanent agricultural easement; 3) remove Phase 7 from the approved mining area as a part of the subject proposed permit amendment (ZF #2018-0015); and 4) reorder Phase 6 as Phase 5, reorder Phase 5 as Phase 6, and allow dry mining to commence on 20 acres of new Phase 5 while mining is simultaneously occurring in Phase 4.

3.6 COMPONENTS OF THE PROJECT

The applicant requests the following modifications to the existing approvals:

1. Extend Mining – Extend the mining permit by 20 years through 2047 to allow for the continued extraction of aggregate reserves within the approved mining footprint.

2. Increase Total Tonnage – Increase the total production limit over the term of the permit from 32,170,000 tons mined (26,700,000 tons sold) to 53,536,426 tons mined (46,636,119 tons sold) through 2047 (see Table 3-3, CEMEX Tonnage Comparisons).

3. Increase Allowed Area of Simultaneously Disturbed Acreage – Remove the previous analytical assumption in the 1996 EIR restricting the maximum disturbed area at any one time (126 acres[11]) and allow simultaneous disturbance of larger acreage at any one time consistent with the proposed phasing and operation. The range of actively disturbed[12] land at any one time during the remaining life of the proposed project would range from 167 to 285 acres (see Section 4.1, Agricultural and Forestry Resources).

4. Increase Acreage Used for Processing – Use the eastern half of Phase 2 as an extension of the plant site for stockpiles and construction materials recycling. Use Phase 3 for a new settling pond for deposition of process fines. As a result, reclamation of these areas would not occur until after all mining on the site has been completed (post 2047). Reclamation of all areas would be complete by 2052.

[11] 1996 EIR, Draft volume, page 4.5-14.

[12] Section 10-4.429 (Setbacks), subsection (c), of the County Mining Ordinance defines “actively disturbed” areas as those on which mining operations of any kind, or the implementation of reclamation such as grading, seeding, or installation of plant material are taking place.

Table 3-3: CEMEX Tonnage Comparison

	Annual Tons Mined: Base Amount (+) 20% Exceedance[3] Total	Annual Tons Sold: Base Amount (+) 20% Exceedance[3] Total	Max Tons Mined (thru year)	Max Tons Sold (thru year)
Approved Tonnages	1,204,819[1,2] 240,964[1,2] 1,445,783[1,2]	1,000,000[1] 200,000[1] 1,200,000[1]	32,170,000[4] (thru 2027)	26,700,000[4] (thru 2027)
Proposed Tonnages	1,149,425[6] 229,885 1,379,310	No change	53,536,426[5] (thru 2047)	46,636,119[5] (thru 2047)
Difference	-55,394 -11,079 -66,473	No change	+21,336,526	+19,936,119

Source: TSCHUDIN CONSULTING GROUP, January 28, 2023.
Notes:
[1] Board of Supervisors Staff Report, November 25, 1996.
[2] Approximately 17 percent waste loss assumed in original approvals.
[3] Approved/allowed under Mining Ordinance Section 10-4.405.
[4] Development Agreement No. 96-287, Recital V, third paragraph.
[5] Table 3-6, CEMEX Tonnage Totals.
[6] Assumes 13 percent waste loss beginning in 2022 based on actual average.

5. Extend Reclamation – Extend the reclamation date by up to 36 years, in some areas.

6. Remove Phase 7 – Modify the approved mining and reclamation plans to eliminate Phase 7 (15 acres of mining; 21.1 acres of reclamation) located on the west side of I-505. As a result, the modified project would be completely to the east of I-505.

7. Other Modifications to Approved Mining Plans – These proposed changes would: a) modify phase boundaries; b) comport all approvals over the years to one conformed set of mining and reclamation plans; c) incorporate areas previously overmined as required by the 2017 Stipulated Order to Comply; and d) reflect existing conditions at the mining and processing areas (see Figure 3-3, Approved Overall Mining Plan; Figure 3-4, Approved Mining Phases; Figure 3-5, Proposed Overall Mining Plan; Figure 3-6, Proposed Mining Phases; Appendix C, Proposed Mining Plan Sheets).

8. Other Modifications to Approved Reclamation Plans (Plan Sheets, Narrative, and Habitat Restoration Plan) – These proposed changes would: a) comport all approvals over the years to one conformed set of reclamation plans and one updated complete Habitat Restoration Plan (HRP); b) add other areas (totaling 100 acres) previously disturbed by mining that were not included within the original reclamation area boundaries; and c) decrease reclaimed agriculture by ±57 acres, increase reclaimed open water lake by 51 acres, decrease reclaimed tree crops by 138 acres, and increase reclaimed row crops by 111 acres (see Figure 3-7, Approved Overall Reclamation Plan; Figure 3-8, Proposed Overall Reclamation Plan; Figure 3-9, Mining and Reclamation Area Comparison; Appendix D, Proposed Reclamation Plan Sheets; Appendix E, Proposed Reclamation Narrative and Habitat Restoration Plan).

9. Modify Various Conditions of Approval – These proposed changes would integrate all previously approved conditions and include modifications to the conditions to reflect the proposed project as approved.

10. Amend the Development Agreement – These proposed changes would reflect the project as approved (including the extended permit period, and modified mining and reclamation plans) and describe modified/expanded net gains dedications and contributions.

Table 3-4 provides a summary of Mining and Reclamation by Phase comparing what is approved with what is requested as a part of this project proposal. Table 3-5 provides a history of phase changes overtime.

Increase in Total Production Limit

The annual production for the mine is currently limited to 1,204,819 tons mined (1,000,000 tons sold). Pursuant to Section 10-4.405 of the Mining Ordinance, the operation has approval to exceed the annual production level by up to 20 percent to 1,445,783 tons mined (1,200,000 tons sold) in any one year, so long as the running ten-year production average does not exceed 12,048,190 tons mined (10,000,000 tons sold). Under no circumstances may annual production exceed 1,445,783 tons mined (1,200,000 tons sold). This limit does not apply to recycled waste material or aggregate obtained from in channel maintenance work performed in accordance with the CCAP. The project proposes no change to these annual tonnage limits.

Existing approvals for the project allow for the excavation of a total of 32,170,000 tons mined (26,700,000 tons sold) of sand and gravel, based on an assumption of 17 percent wash loss at the aggregate processing plant (that will be directed to settling ponds). The project proposes to increase the total tonnage to be mined over the life of the permit, at the same annual rate of production as originally approved.

Figure 3-3
Approved Overall Mining Plan

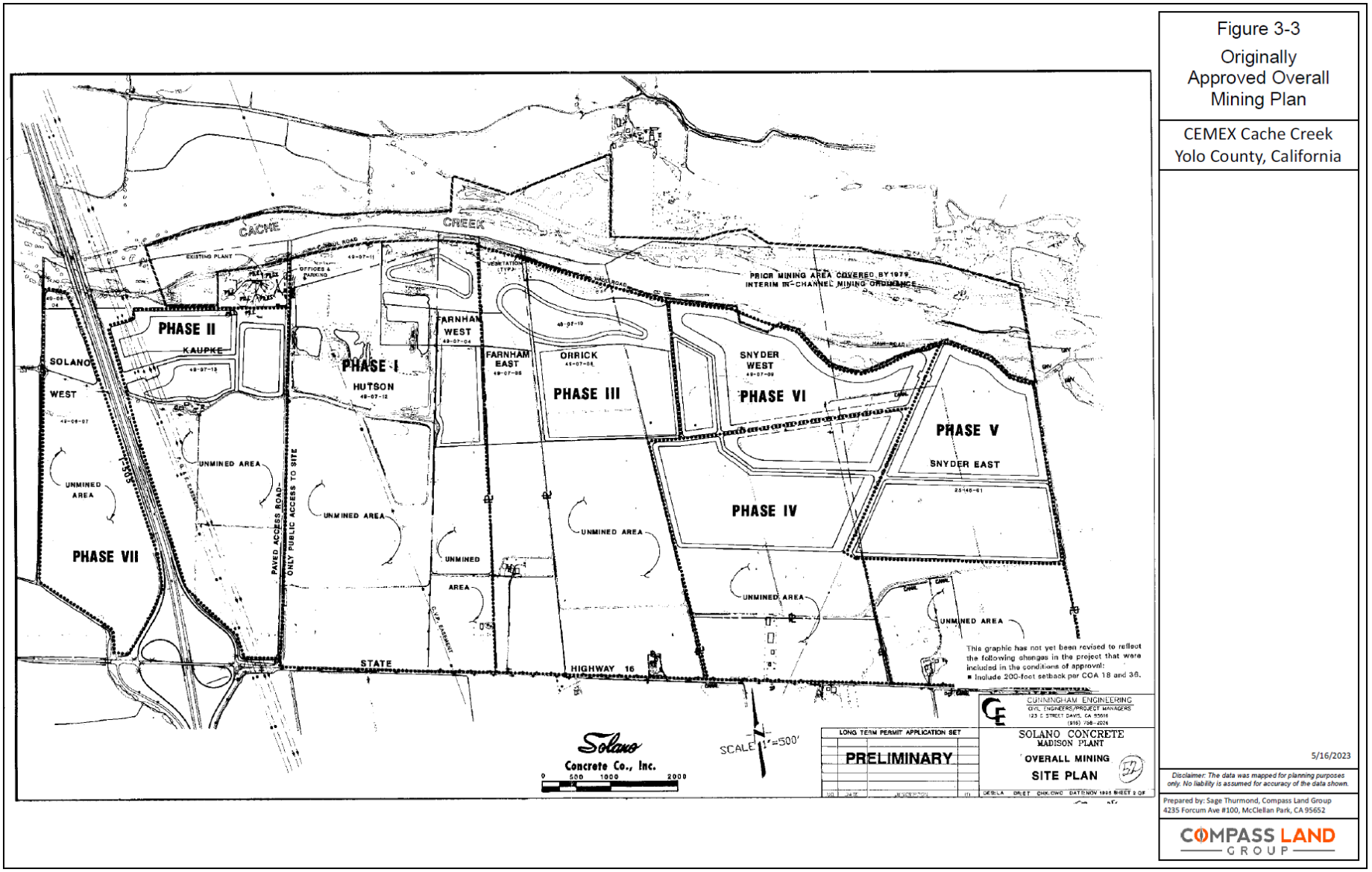

Figure 3-4
Approved Mining Phases

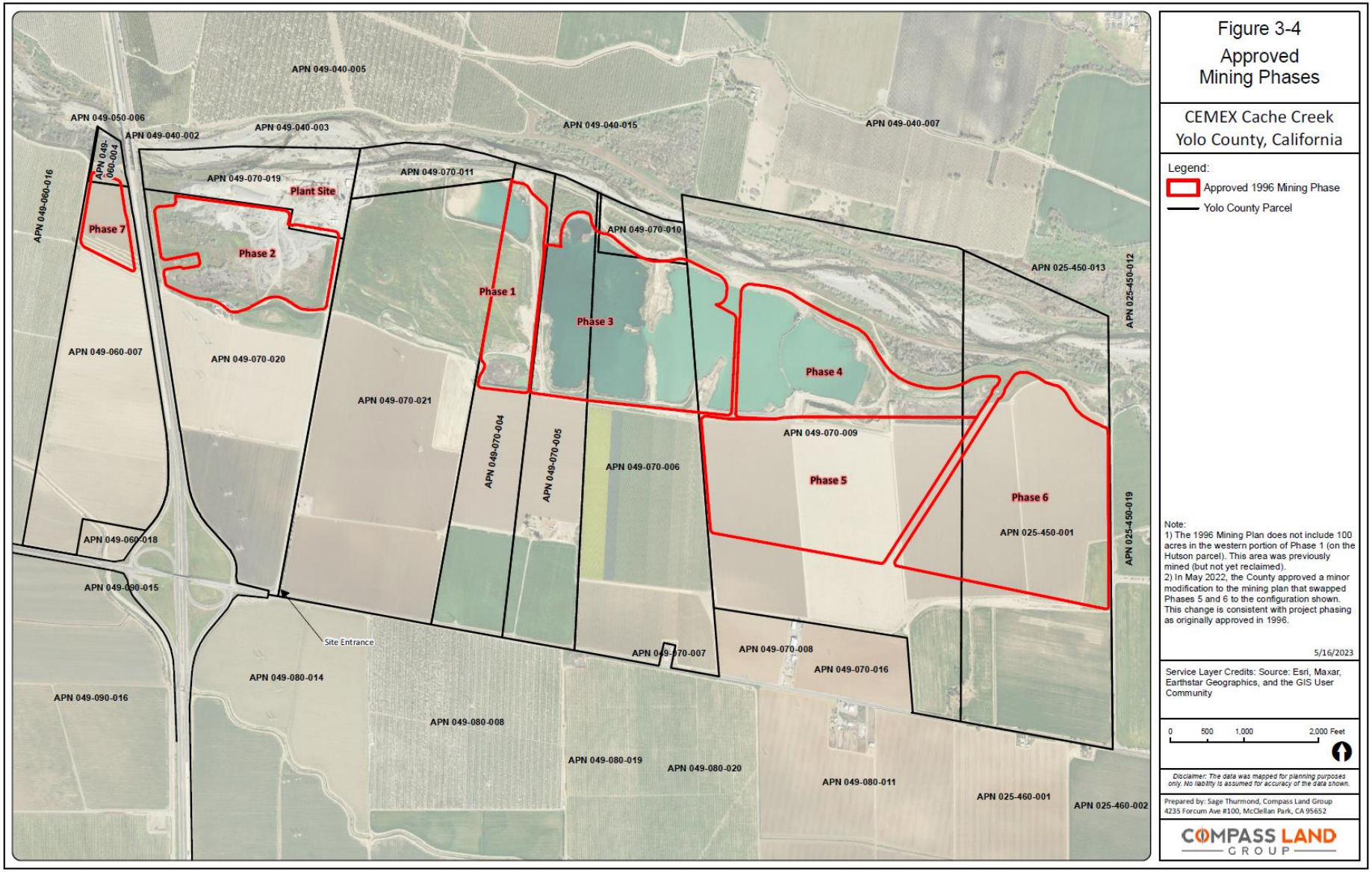

Figure 3-5
Proposed Overall Mining Plan

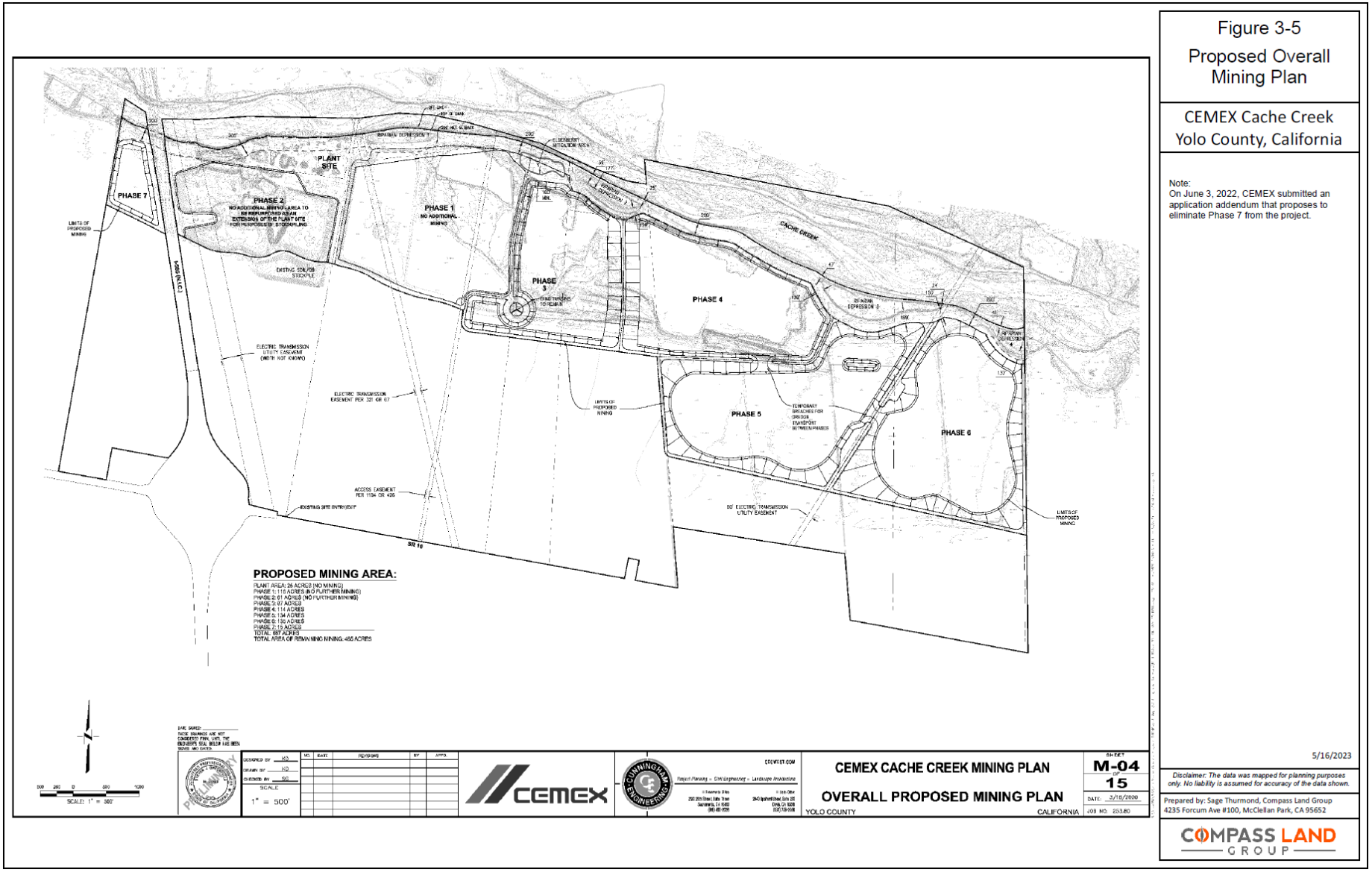

Figure 3-5
Proposed Overall Mining Plan

CEMEX Cache Creek
Yolo County, California

Note:
On June 3, 2022, CEMEX submitted an application addendum that proposes to eliminate Phase 7 from the project.

5/16/2023

Disclaimer: The data was mapped for planning purposes only. No liability is assumed for accuracy of the data shown.

Prepared by: Sage Thurmond, Compass Land Group
4235 Forcum Ave #100, McClellan Park, CA 95652

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Figure 3-6
Proposed Mining Phases

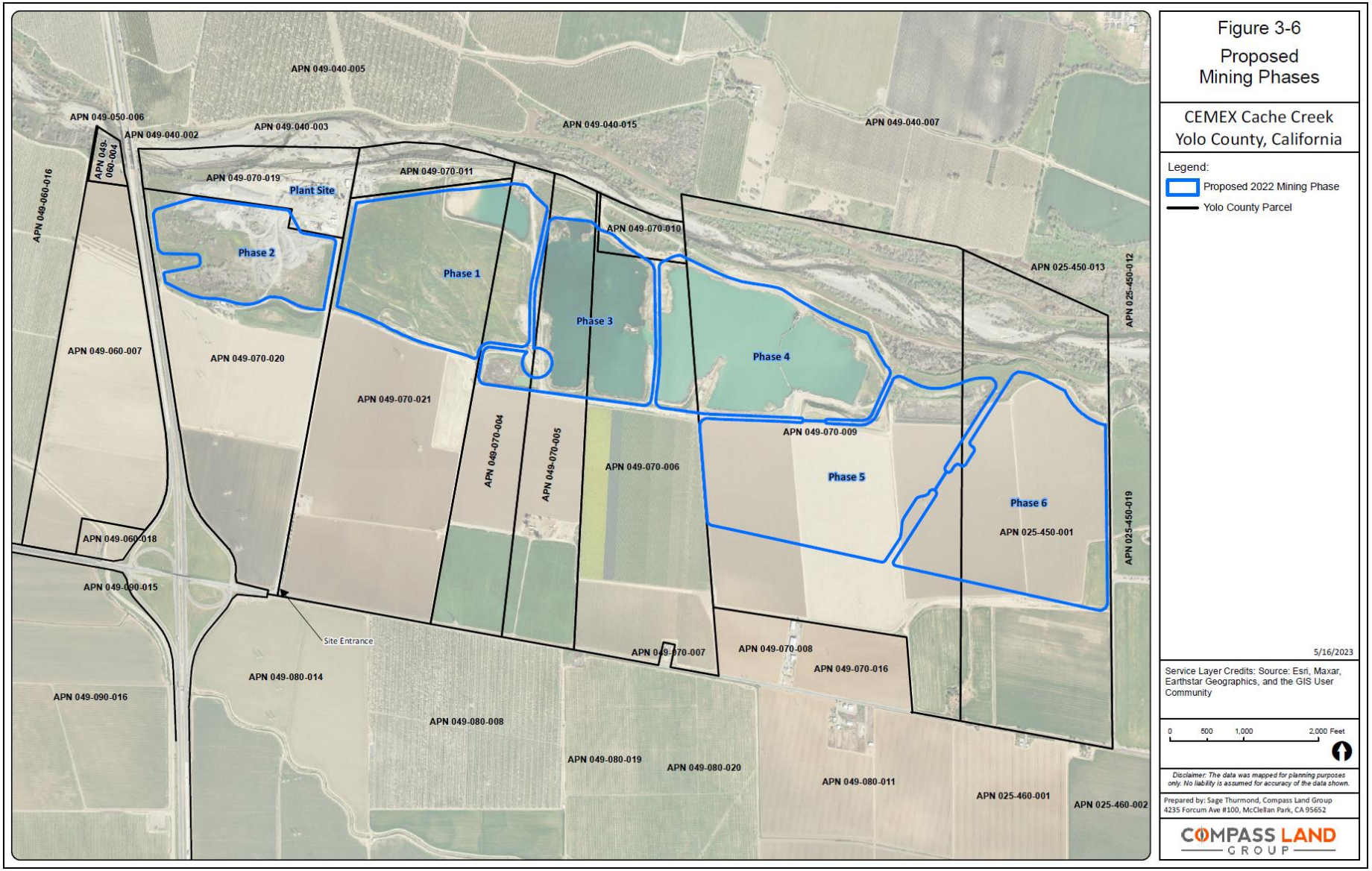

Figure 3-7
Approved Overall Reclamation Plan

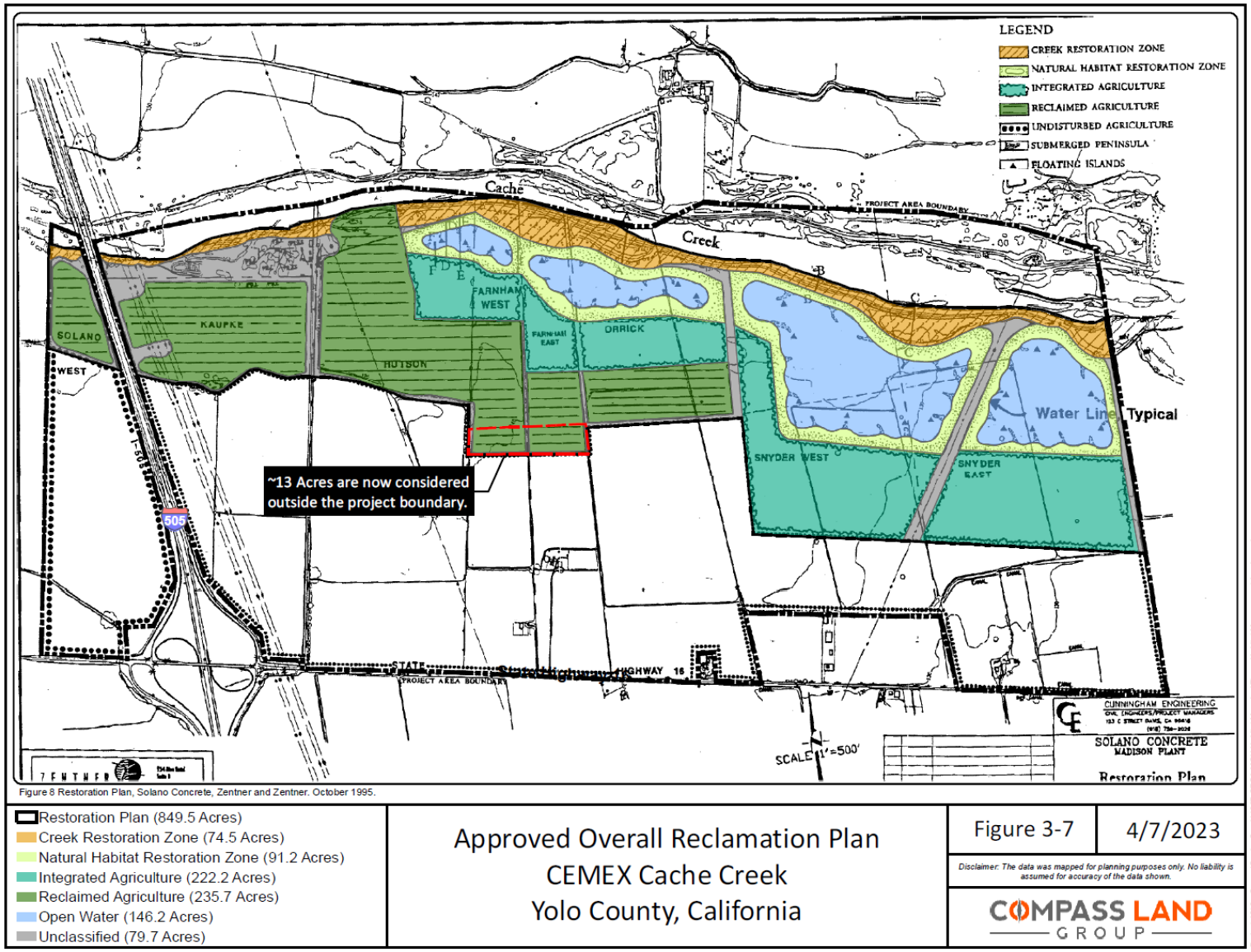

Figure 8 Restoration Plan, Solano Concrete, Zentner and Zentner. October 1995.

- Restoration Plan (849.5 Acres)
- Creek Restoration Zone (74.5 Acres)
- Natural Habitat Restoration Zone (91.2 Acres)
- Integrated Agriculture (222.2 Acres)
- Reclaimed Agriculture (235.7 Acres)
- Open Water (146.2 Acres)
- Unclassified (79.7 Acres)

Approved Overall Reclamation Plan
CEMEX Cache Creek
Yolo County, California

Figure 3-7 | 4/7/2023

Disclaimer: The data was mapped for planning purposes only. No liability is assumed for accuracy of the data shown.

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Figure 3-8
Proposed Overall Reclamation Plan

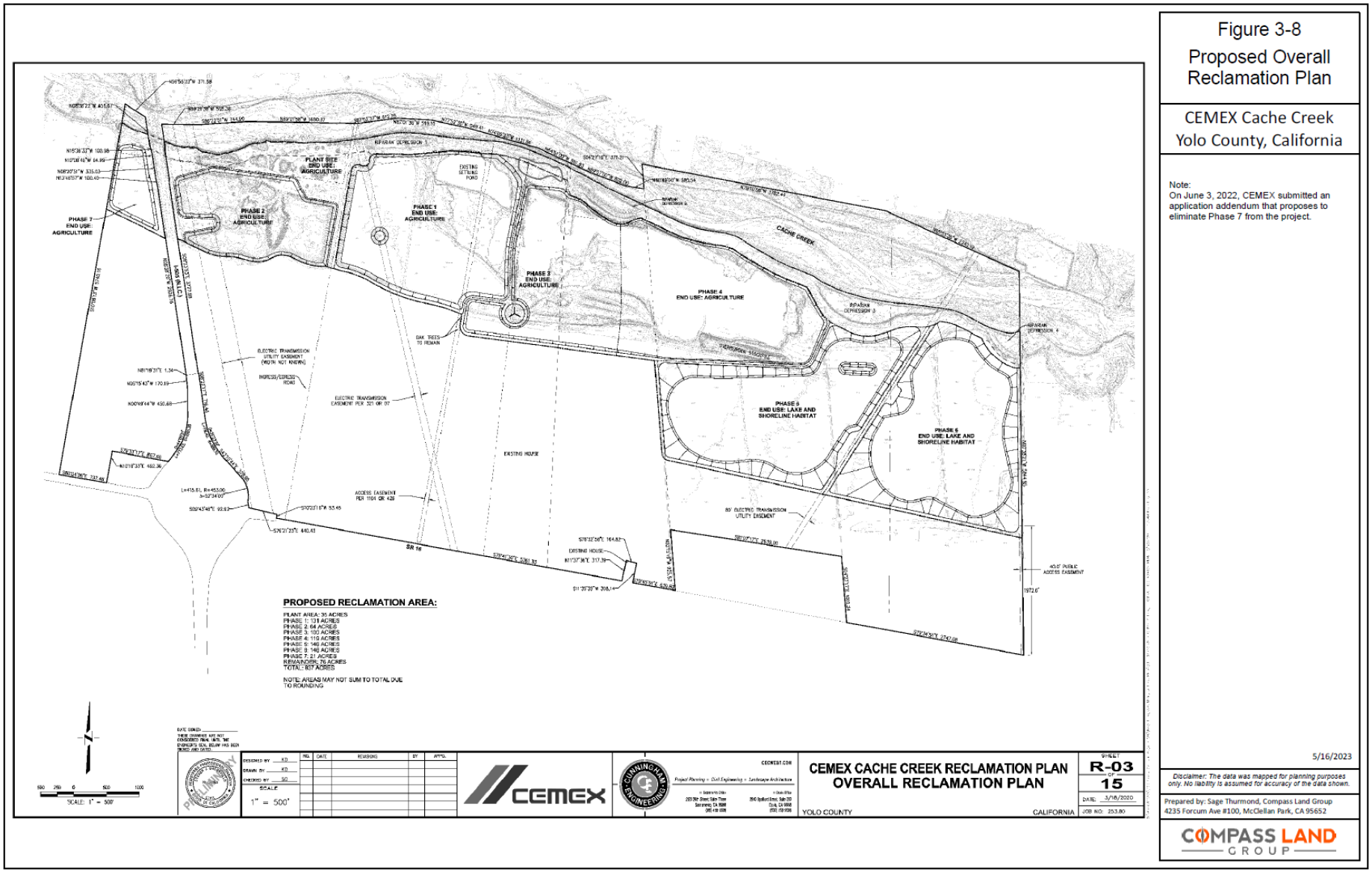

Figure 3-8
Proposed Overall Reclamation Plan

CEMEX Cache Creek
Yolo County, California

Note:
On June 3, 2022, CEMEX submitted an application addendum that proposes to eliminate Phase 7 from the project.

5/16/2023

Disclaimer: The data was mapped for planning purposes only. No liability is assumed for accuracy of the data shown.

Prepared by: Sage Thurmond, Compass Land Group
4235 Forcum Ave #100, McClellan Park, CA 95652

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Figure 3-9
Mining and Reclamation Area Comparison

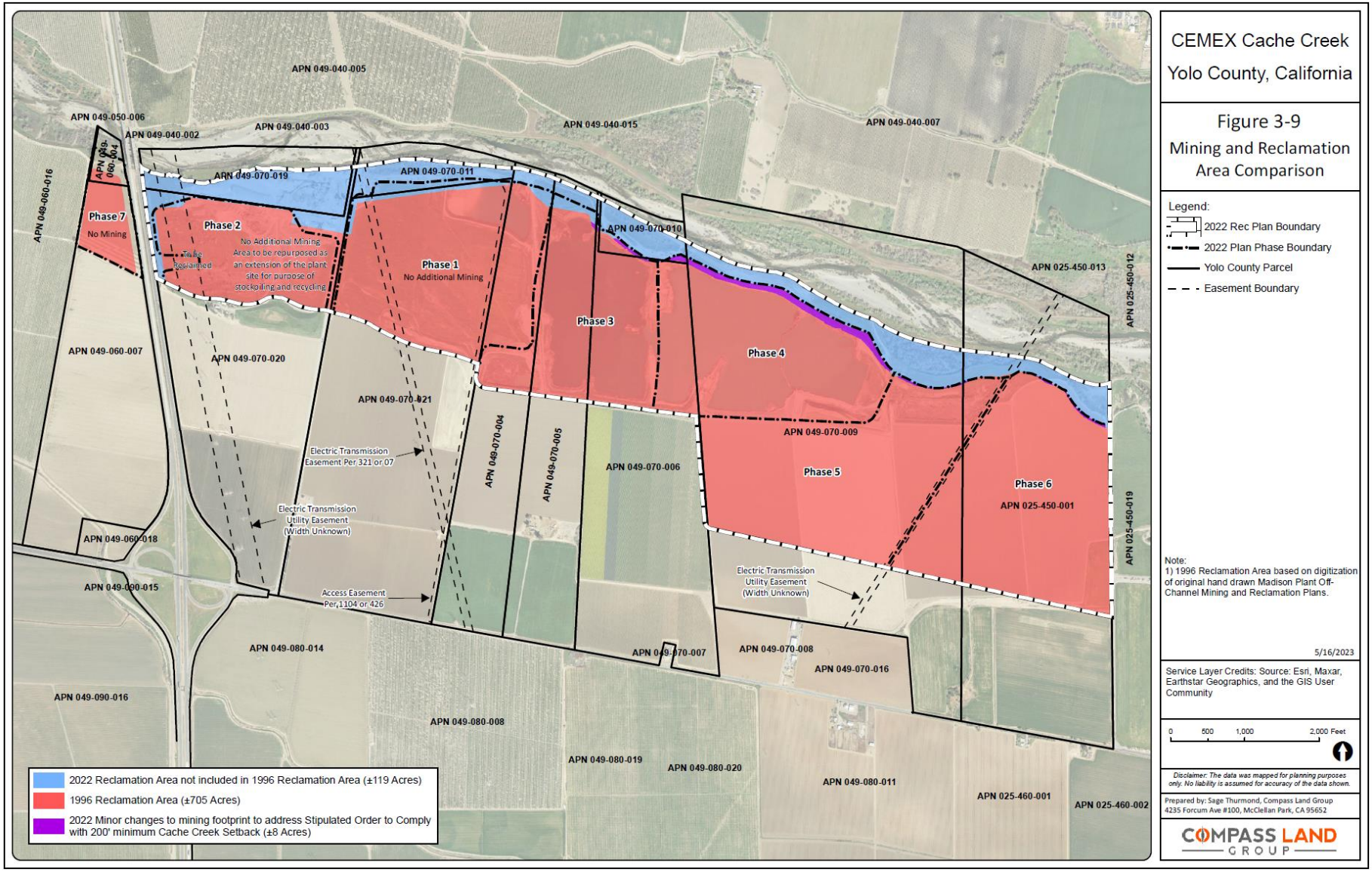


Table 3-4: Mining and Reclamation by Phase

Proposed Project Phase #	1996 Acres in Phase[1]	1996 Mining End Date[2]	1996 Reclamation End Date[2]	Proposed Acreage		Proposed Mining End Date	Proposed Reclamation End Date[19]	Change in Reclamation Acres	Change in Mining End Date (in years)	Change in Reclamation End Date (in years)
				Mining[6]	Reclamation[14]					
1 (Hutson + Farnham West)	140[3]	1998	2002	116[7]	131[7]	N/A[13]	2025[20]	-9[7]	N/A	+23
2 (Kaupke) A (west) B (east)	64	2004	2012	61[8]	64	N/A	2026 (west) 2048 (east)	0	N/A	+14 (west) +36 (east)
3 (Orrick + Farnham East)	129	2011	2017	87[9]	100[9]	2023	2048	-29[9]	+12	+31
4[17] (portion of Snyder West)	84	2016	2021	114[10]	119	2024	2039	0	+8	+18
5[22] (portion of Snyder West)	119	2026	2031	134[12]	146	2033 2047[21]	2034 2048[21]	+62	+7 to +21	+3 to +17
6[18] (Snyder East)	134	2022	2026	135[11]	146[11]	2047	2048	+12[11]	+25	+22
7[23] (Solano)	15	2026	2029	0	0	N/A	N/A	-15	0	0
Plant	30	N/A	2029	N/A	35	N/A	2048	+5	N/A	+19
Other	N/A	N/A	N/A	N/A	76[15, 16]	N/A	2048	+76	N/A	N/A
Total	**716[4]**	**2026[5]**	**2031**	**647**	**816**	**2047**	**2048**	**+102[16]**	**+21**	**+17**

Source: TSCHUDIN CONSULTING GROUP, January 28, 2023.

Notes:

[1] 1996 Development Agreement (as modified May 22, 2001 and April 15, 2003), pdf page 7 and 183. Note these acreages differ from 1996 EIR, Draft volume, page 3-13 for phases: 2, 3, 5, and 6 with acreage for each being 1 to 6 acres lower in the Development Agreement, for a total difference of -12 acres in the development agreement.

[2] 1996 EIR, Draft volume, page 3-18. These dates were assumed in the EIR. Based on date of actual approval, these dates were all off by one year. The permit expires August 11, 2027.

[3] Includes 100-acre Hutson parcel that was mined under a prior approval but not yet reclaimed.

[4] 30-acre plant site not included in original total acreage.

[5] Reflects EIR assumption. Based on date of actual approval, these dates were all off by one year. The permit expires August 11, 2027.

[6] See Figures 3-10, 3-11, and 3-14 through 3-17.

[7] There is no further mining proposed in Phase 1. This reflects a decrease of 24 acres within the mining boundary and 9 acres within the reclamation boundary due primarily to proposed revisions to the phase boundary for Phases 1 and 3. The proposed mining plan absorbs the southern end of the Farnham West (current Phase 1) parcel as part of proposed Phase 3. In addition, the proposed mining plan corrects for minor discrepancies found in the original mining plan, including an approximately 2 acre overlap at the Phase 1 and Phase 3 boundary. Also, the proposed Mining Plan, (on Sheet M-05), does not accurately represent the 1996-approved Mining Plan “top of slope” area – it is depicted smaller than what was actually approved in 1996. See Figure 3-9.

[8] There is no further mining proposed in Phase 2. This reflects a decrease of 4 acres within the mining boundary due to proposed minor boundary adjustments in the mining plan to better reflect existing mining disturbances. See Figure 3-11.

[9] There is no further mining proposed in Phase 3. This reflects a decrease of 46 acres within the mining boundary and 29 acres within the reclamation boundary due primarily to proposed revisions to the phase boundary for Phases 1 and 3, and Phases 3 and 4. The proposed mining plan absorbs the southern end of the Farnham West parcel (current Phase 1) as part of proposed Phase 3, and shifts the eastern boundary of Phase 3 to the west to match the alignment of an existing north-south trending alluvial separator that was recently

completed to support the use of Phases 3 as a settling pond. The proposed mining plan also includes other minor boundary adjustments to better reflect existing mining disturbances, particularly along the northern boundary of the mining phase where no further mining will occur. See Figure 3-14.

[10] Decrease of 5 acres within the mining boundary due primarily to proposed revisions to the phase boundary. The proposed mining plan shifts the western boundary of Phase 4 to the west to match the alignment of the existing north-south trending alluvial separator. In addition, the proposed mining plan shifts the eastern boundary of Phase 4 to the west in the area that will be backfilled for reclamation to agriculture. Also, the proposed mining plan includes other minor boundary adjustments to better reflect existing mining disturbance. See Figure 3-15.

[11] Increase of 12 acres within the reclamation boundary because proposed reclamation plan includes oak and other habitat restoration to the north and around the perimeter edges of the mining disturbance area that are accounted for as part of Phase 6 reclamation.

[12] Increase of 51 acres within the mining boundary and 62 acres within the reclamation boundary due to proposed minor boundary adjustments. The proposed mining plan creates a new Phase 5 boundary that encompasses a portion of Phase 4 (with the 2003 phase change) and all of the area to the west of the major electric transmission utility easement that will be reclaimed to a lake. The proposed mining plan also includes other minor boundary adjustments for current design purposes, such as accommodation of drainage rip-rap run-downs from the electric easement area. See Figure 3-16.

[13] Mining on the Hutson parcel concluded in 1995. Mining on the Farnham West parcel concluded in 1996.

[14] See Table 3-7

[15] Other disturbed acreage in buffers and setbacks proposed to be added to reclamation plans.

[16] Total is off slightly due to rounding.

[17] Analyzed as Phase 6 in original 1996 approval (see Table 3-5).

[18] Analyzed as Phase 5 in original 1996 approval (see Table 3-5).

[19] Reclamation monitoring will continue for three to five years beyond the anticipated reclamation end date to ensure that reclamation performance standards are met.

[20] Phase 1 agricultural plantings (110 acres in barley) were completed December 2022 per tenant farmer. However, existing silt pond in northeast corner of Phase 1 requires fill and planting which is anticipated to occur in 2025.

[21] The majority of mining in Phase 5 will be complete in 2033. After Phase 6 is mined, the operator will perform limited additional mining in the northern portion of Phase 5 as the conveyor assembly is removed to develop a habitat island as part of reclamation. This work is anticipated to occur in 2047.

[22] Analyzed as Phase 4 in 1996, subsequently swapped with Phase 6 in 2003, and later swapped with Phase 5 in 2022. See Table 3-5.

[23] Analyzed as Phase 7 in 1996. Proposed for deletion as a part of the proposed project.

Table 3-5: History of Phase Changes

Proposed Project Phase #	Phase Name	1996 EIR and Approval	2003 Project Modifications	2022 Project Modifications
1	Hutson + Farnham West	1	1	1
2	Kaupke	2	2	2
3	Orrick + Farnham East	3	3	3
4	Snyder West (portion)	6	4	4
5	Snyder West (portion)	4	6	5
6	Snyder East	5	5	6
N/A	Solano	7	7	7
Plant	Plant	Plant	Plant	Plant

Source: TSCHUDIN CONSULTING GROUP, January 28, 2023.

See Table 3-3 for a comparison of tonnage. Table 3-6 below provides total tons over time.

Table 3-6: CEMEX Tonnage Totals

Period (Years) Description	Total Tons Mined	Total Tons Sold
1997 to 2021 (25 years) County Tonnage Records[1]	23,651,376	20,636,119
Remaining Approved Tonnage	8,518,624[5]	6,063,881[6]
2022 to 2047 (26 years) Proposed Total Tonnage	29,885,050[3]	26,000,000[4]
Total Tonnage	53,536,426[9]	46,636,119[8]
"New" Tonnage[7]	21,366,426	19,936,119

Source: TSCHUDIN CONSULTING GROUP, January 12, 2023.

Notes:

[1] From Yolo County mining records based on mandatory annual operator reports. Actual reported waste loss for 1997 to 2021 averaged 13 percent.

[2] Deleted.

[3] 26 years (2022 through 2047) x 1,149,425 tons mined = 29,885,050 tons mined. Assumes approximately 13 percent waste loss beginning in 2022 based on best available geologic information.

[4] 26 years (2022 through 2047) x 1,000,000 tons sold per year average = 26,000,000 tons sold.

[5] 32,170,000 – 23,651,376 = 8,518,624

[6] 26,700,000 – 20,636,119 = 6,063,881

[7] Proposed total tonnage beyond that identified and analyzed in 1996 EIR (proposed total tonnage – remaining approved tonnage). Note the CCAP Update FEIR analyzed 166.0 million new tons mined including assumptions for existing land zoned SGRO and the Teichert Shifler application which has since been approved.

[8] Reflects actual tonnage sold (20,636,119 tons) for 25-year period (1997 to 2021) plus assumed 26.0 mil tons to be sold in future (2022 to 2047). Actual waste loss for 1997 to 2021 averaged 13 percent. Assumed waste loss for 2022 to 2047 is 13 percent based on prior actual average.

[9] Reflects actual tonnage mined (23,651,376 tons) for 25-year period (1997 to 2021) plus assumed 29,885,050 mil tons to be mined in future (2022 to 2047). Actual waste loss for 1997 to 2020 was 13 percent. Assumed waste loss for 2021 to 2047 is 13 percent based on prior actual average.

Changes to Mining

The applicant proposes to continue to conduct mining in a manner that will allow for concurrent reclamation to be commenced on mined lands that will not be subject to further surface mining disturbances. The first three phases have already been mined but are not yet fully reclaimed. Except where mining has already occurred, mining operations will continue to be initiated by the removal of vegetation, topsoil/growth media, and overburden materials that lie above marketable sand and gravel deposits. The overlying materials will be removed using scrapers aided by a motor grader and bulldozer, or excavator and off-road haul trucks as needed. After overlying materials are removed, marketable sand and gravel will be excavated using conventional mining equipment such as scrapers, excavators, and bulldozers (for dry mining) and electric dredge (for wet mining).

In 2005, the operator installed an electric dredge to replace drag lines as the primary wet mining tool. The operator has indicated that the electric dredge provides a more efficient method of mining across large waterbodies, enables mining to the maximum depth of the sand and gravel resources, and reduces the consumption of diesel fuel (and associate air quality and greenhouse gas emissions). Following excavation, the sand and gravel will be transported primarily by electric conveyor to the existing aggregate processing plant for washing, crushing, sorting, and sale.

Of the originally approved mining footprint of 586 acres (Figure 3-3), plus the Hutson property (100 acres) and the plant site (30 acres), mining has been completed on Phases 1 through 3 totaling 333[13] acres, leaving 383 acres to be mined in Phases 4 through 6 (Figure 3-4)**.** This reflects the applicant's proposed removal of Phase 7 (15 acres) and other refinements and clarifications as described below:

- For Phase 1 (±116-acres as proposed), no further mining is proposed (Figure 3-10, Proposed Phase 1 Mining Plan Modifications). The applicant is proposing to change the date for final reclamation from 2002 to 2025 to allow for continued reclamation activity on this phase as material is mined from later phases.

- For Phase 2 (±64 acres), no further mining is proposed; the eastern 31.9 acres is proposed to be used for product stockpiling and construction materials recycling utilizing a portable crusher (Figure 3-11, Proposed Phase 2 Mining Plan Modifications; Figure 3-12, Existing and Proposed Stockpiles). Under current approvals Phase 2 was to have been reclaimed in final form by 2012. The western 31.9 acres is proposed to be reclaimed to agriculture by 2026 and the eastern 31.9 acres by 2048 (Figure 3-13, Phase 2 Interim Mining and Reclamation).

[13] See Tables 3-4, 3-8, and 3-9.

Figure 3-10
Proposed Phase 1 Mining Plan Modifications

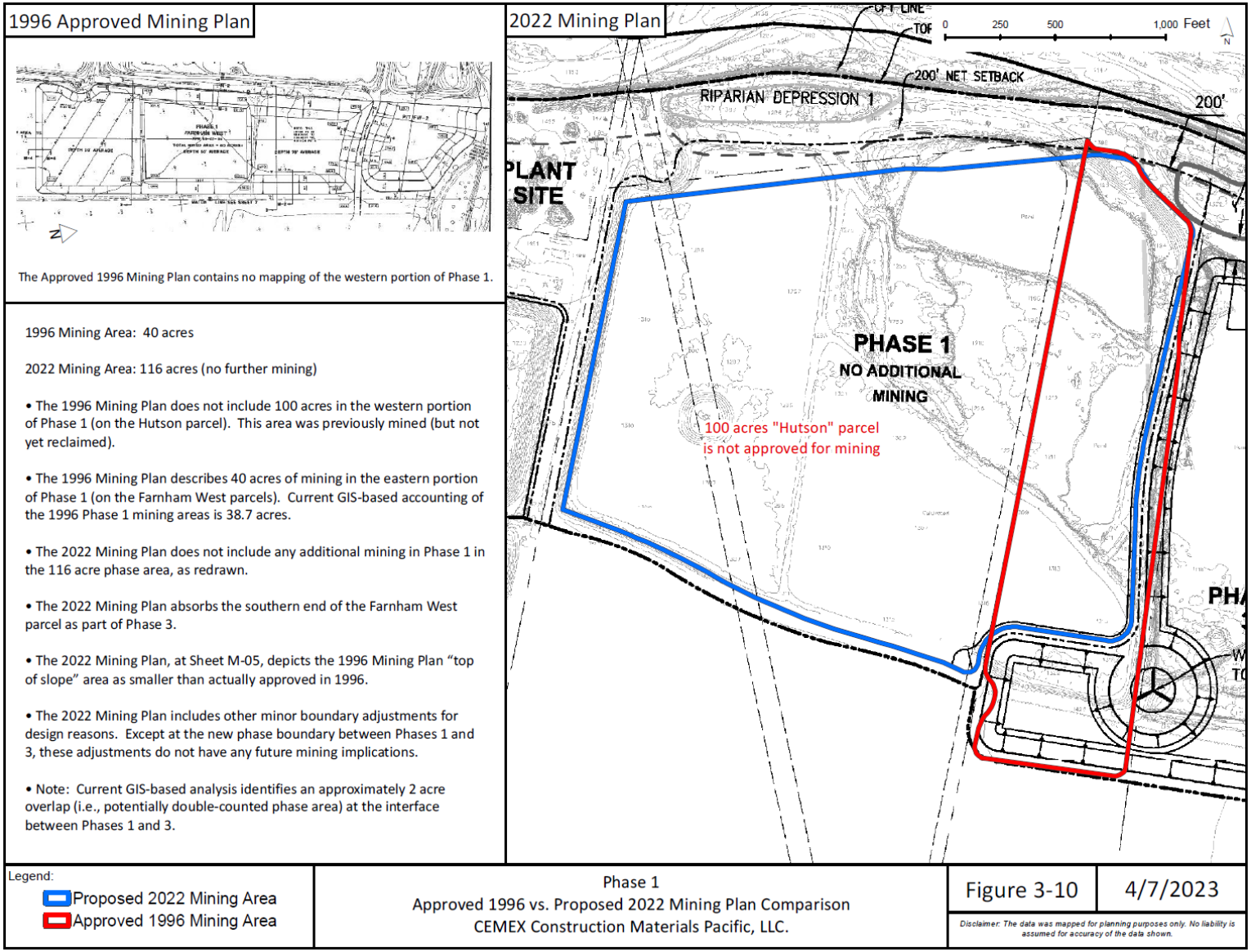


Figure 3-11
Proposed Phase 2 Mining Plan Modifications

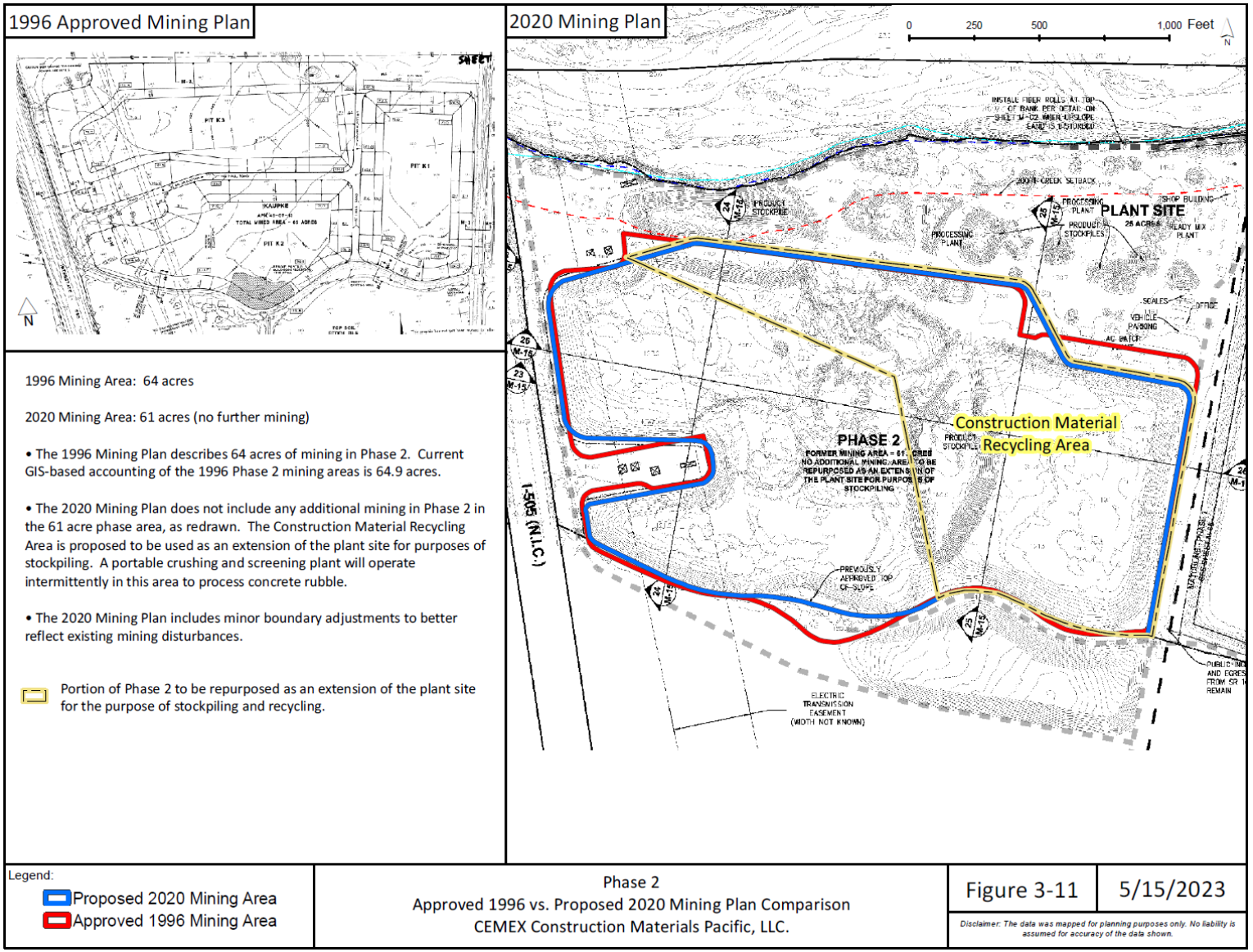


Figure 3-12
Existing and Proposed Stockpile Locations

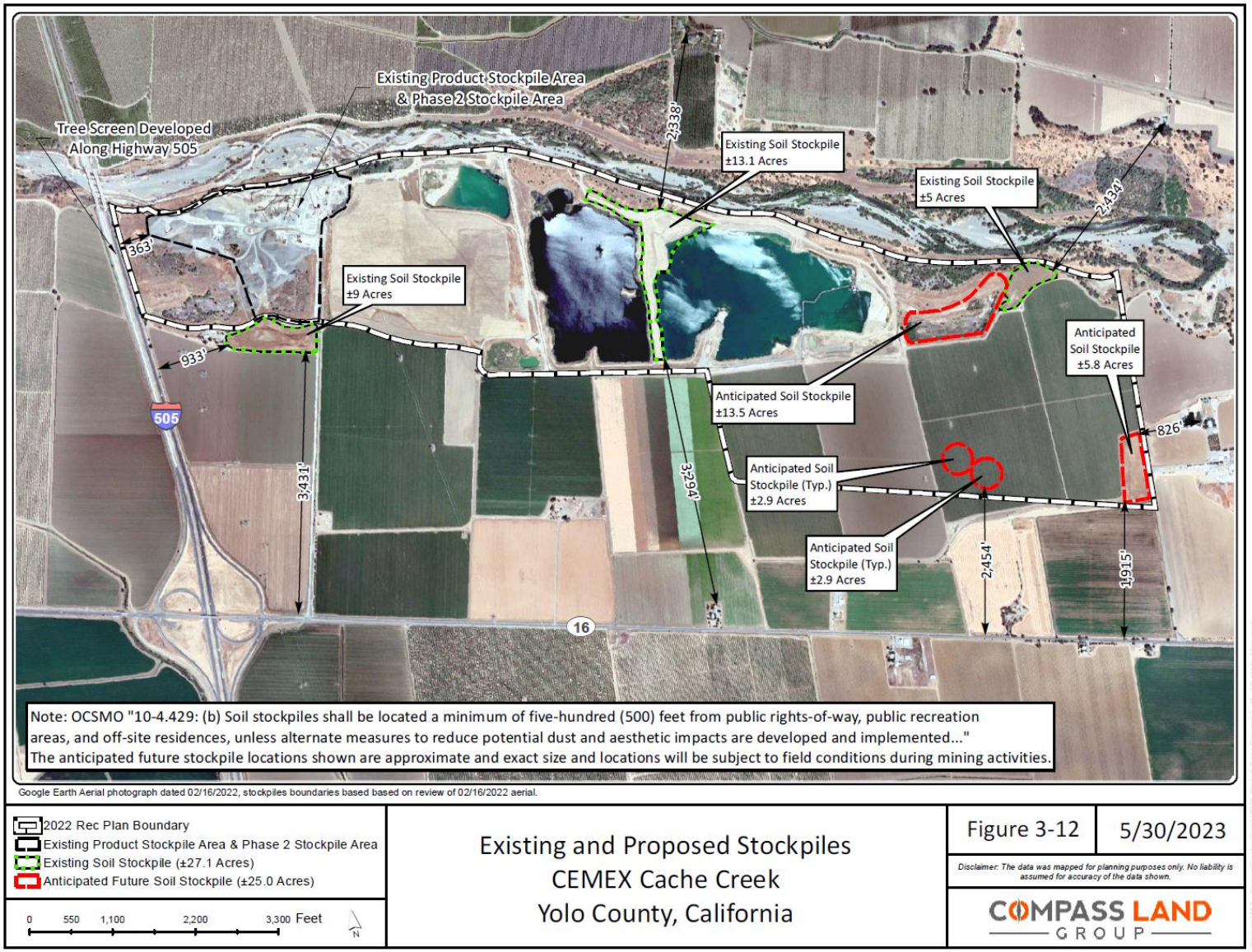
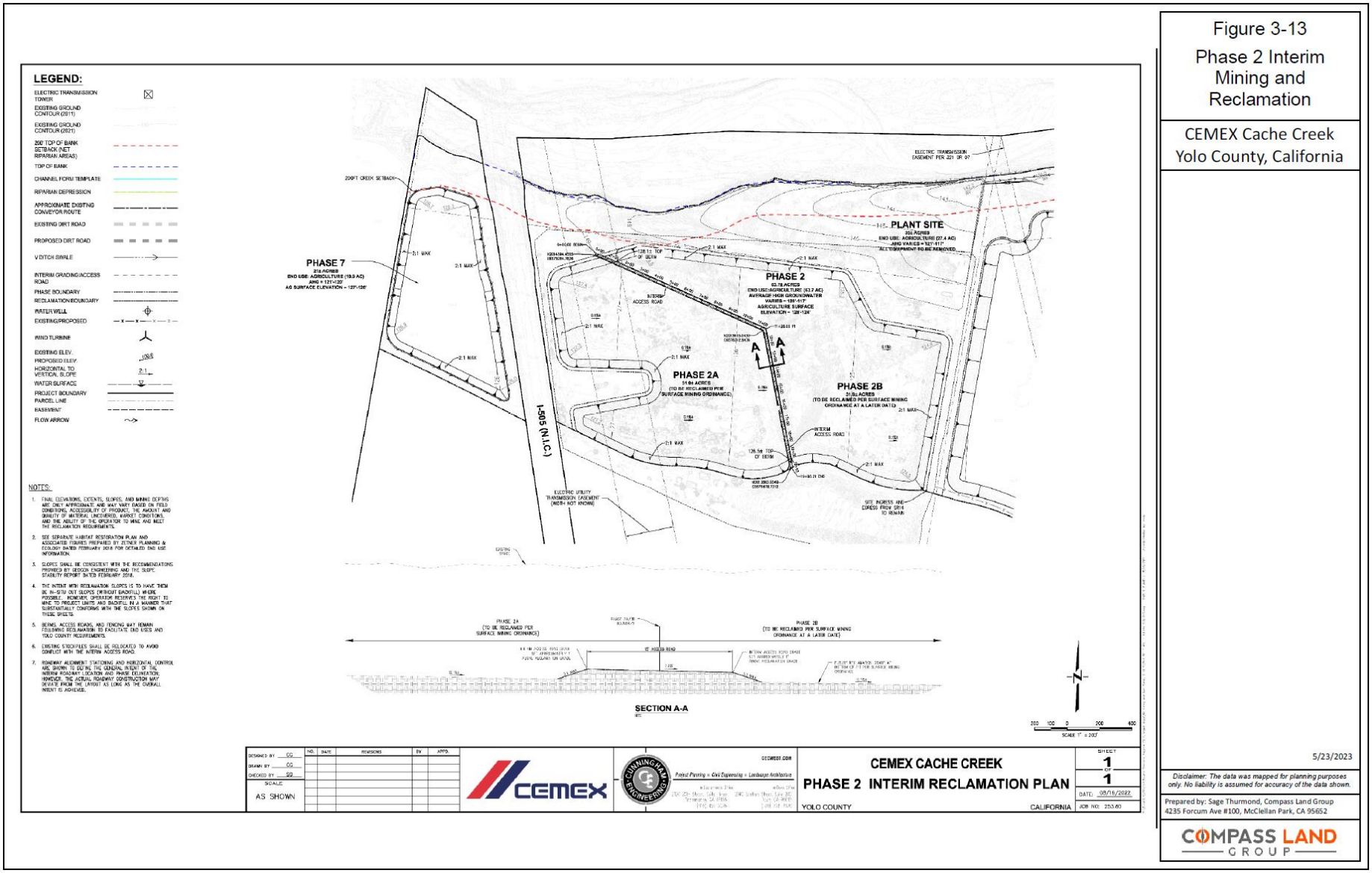


Figure 3-13
Phase 2 Interim Mining and Reclamation



The applicant proposes modifications to Phases 3 through 6 to promote efficient and continuous operation of existing approved mining (Figures 3-14 through 3-17). Phase 3 and Phase 4 were previously being mined concurrently and were the subject of corrective action which resulted in the 2015 Minor Modification acknowledging overlapping mining in these two phases.

Since that time, mining in Phase 3 has been complete and the required alluvial separator between Phase 3 and 4 has been installed. CEMEX is presently mining only in Phase 4, and recently received approval (ZF #2022-0037) to commence dry mining on 20 acres in Phase 5 (previously Phase 6). Mining commenced in November 2022.

- For Phase 3, modify the mining phase boundary to incorporate the southern end of the Phase 1 Farnham West parcel that was not fully mined, shift the eastern boundary to align with a constructed alluvial separator, and use the phase as a settling pond (to accept and settle process wash fines), resulting in a decrease of ±42-acres (from 129 acres to 87 acres) (Figure 3-14, Proposed Phase 3 Mining Plan Modifications). The applicant has indicated the proposed use of Phase 3 as a settling pond will facilitate reclamation backfill to agriculture. The applicant is proposing to change the date for final reclamation from 2017 to 2048 to allow for continued reclamation activity on this phase as material is mined from later phases.

- For Phase 4, modify the mining phase boundary to shift the western boundary to align with a constructed alluvial separator and shift the eastern boundary to reflect an area that will be backfilled and reclaimed to agriculture, resulting in an increase of ±30-acres (from 84 acres to 114 acres). While the approved Development Agreement describes the Phase 4 mining area (originally approved as Phase 6, changed to Phase 4 in 2003) as 84 acres, the 1995 mining plan sheets label the mining area as 90 acres (Figure 3-15, Proposed Phase 4 Mining Plan Modifications). The applicant is proposing to change the date for final reclamation from 2021 to 2039 to allow for continued reclamation activity on this phase as material is mined from later phases.

- For Phase 5 (as modified in a Minor Modification (ZF #2022-0037) approved by the Director on May 10, 2022), modify the mining phase boundary resulting in an increase of ±15-acres (from 119 acres to 134 acres) (Figure 3-16, Proposed Phase 5 Mining Plan Modifications). While the approved Development Agreement describes the Phase 5 mining area (originally approved as Phase 4, changed to Phase 6 in 2003, then changed back to Phase 5 in 2022) as 119 acres, the 1995 mining plan sheets label the mining area as 126 acres. After Phase 6 is mined, CEMEX proposes to undertake limited additional mining in Phase 5 to develop a small habitat island as part of reclamation (Figure 3-8). Proposed date for final reclamation changed from 2031 to 2034, with the habitat island completed in 2048, following removal of the conveyor assembly.

Figure 3-14
Proposed Phase 3 Mining Plan Modifications

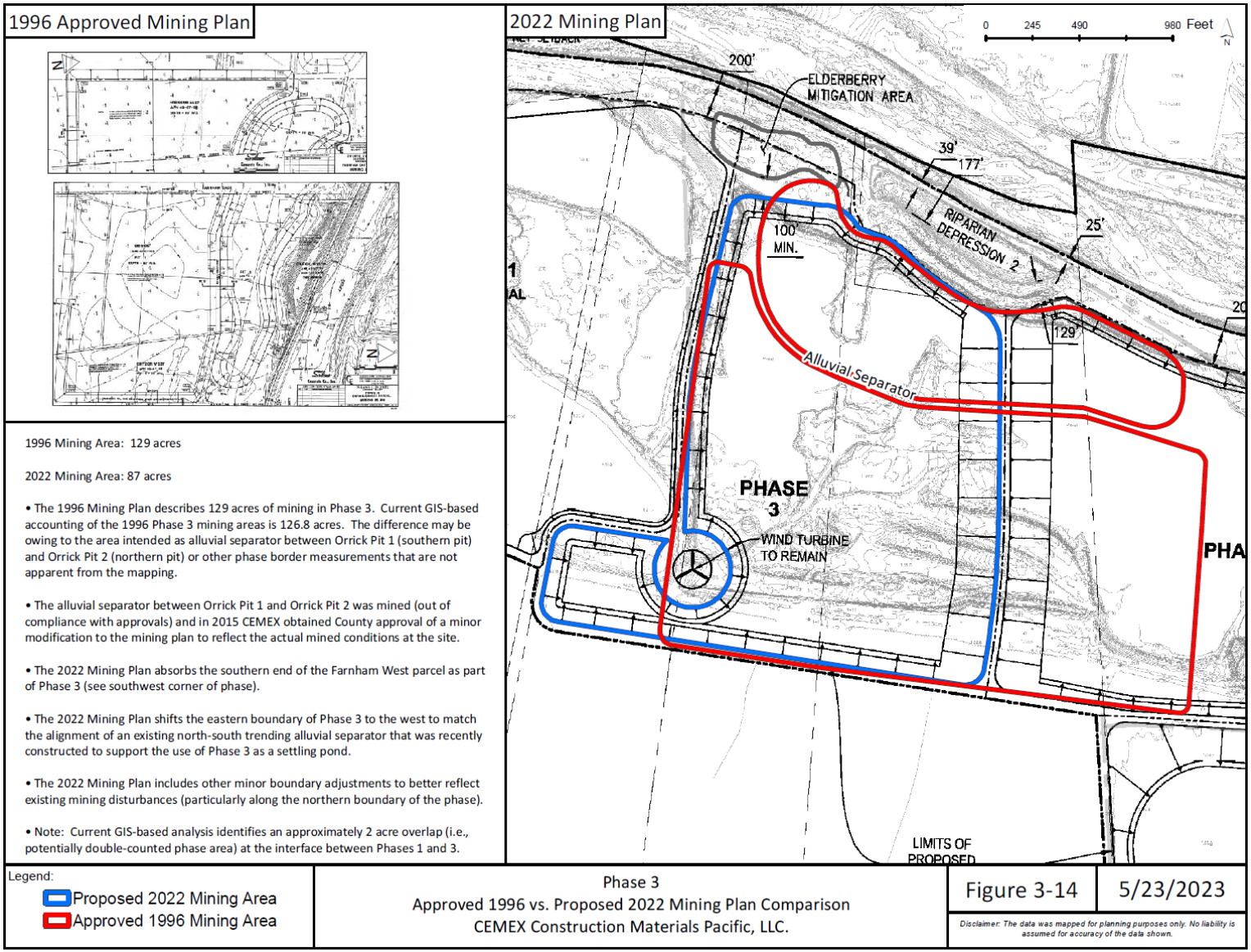


Figure 3-15
Proposed Phase 4 Mining Plan Modifications

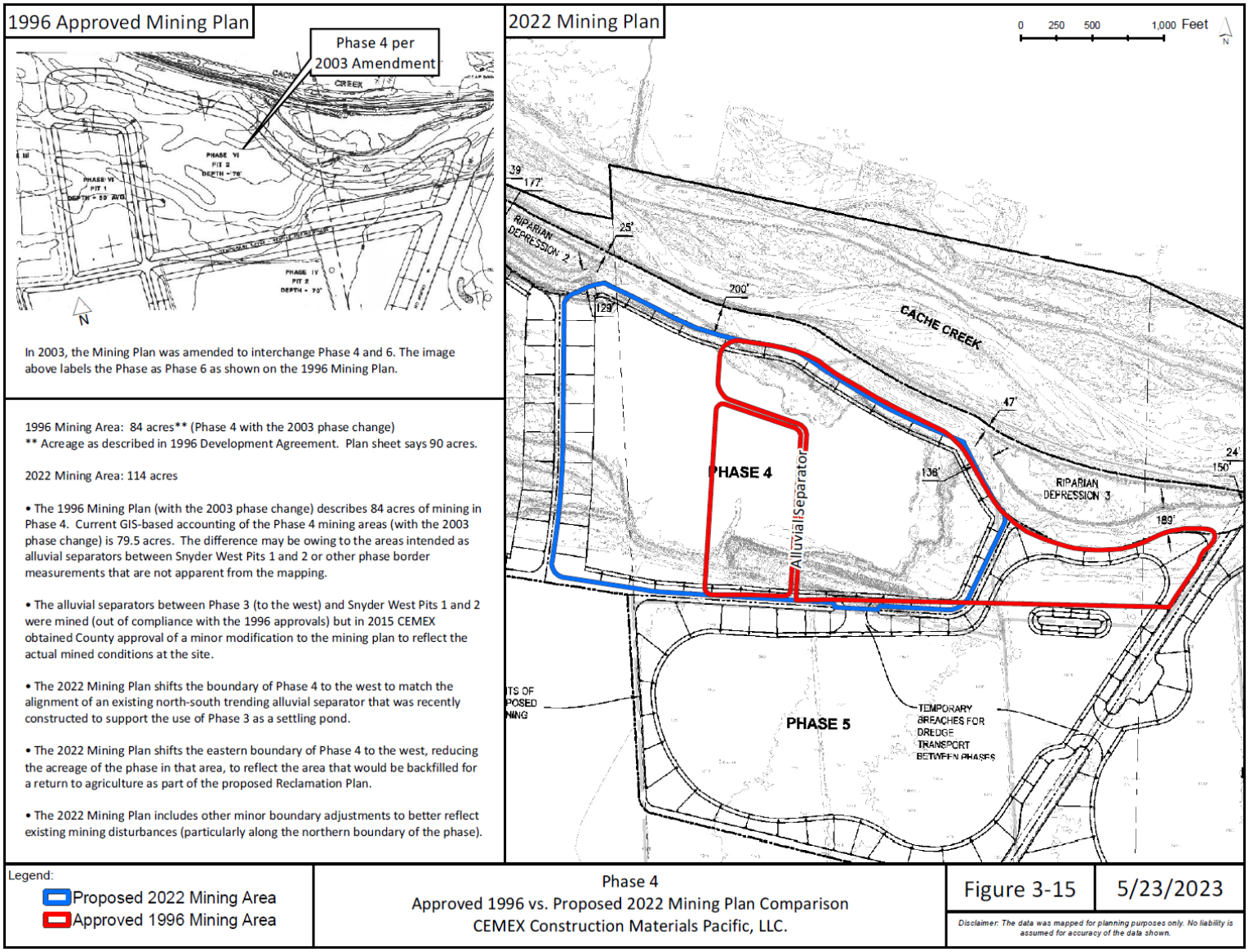
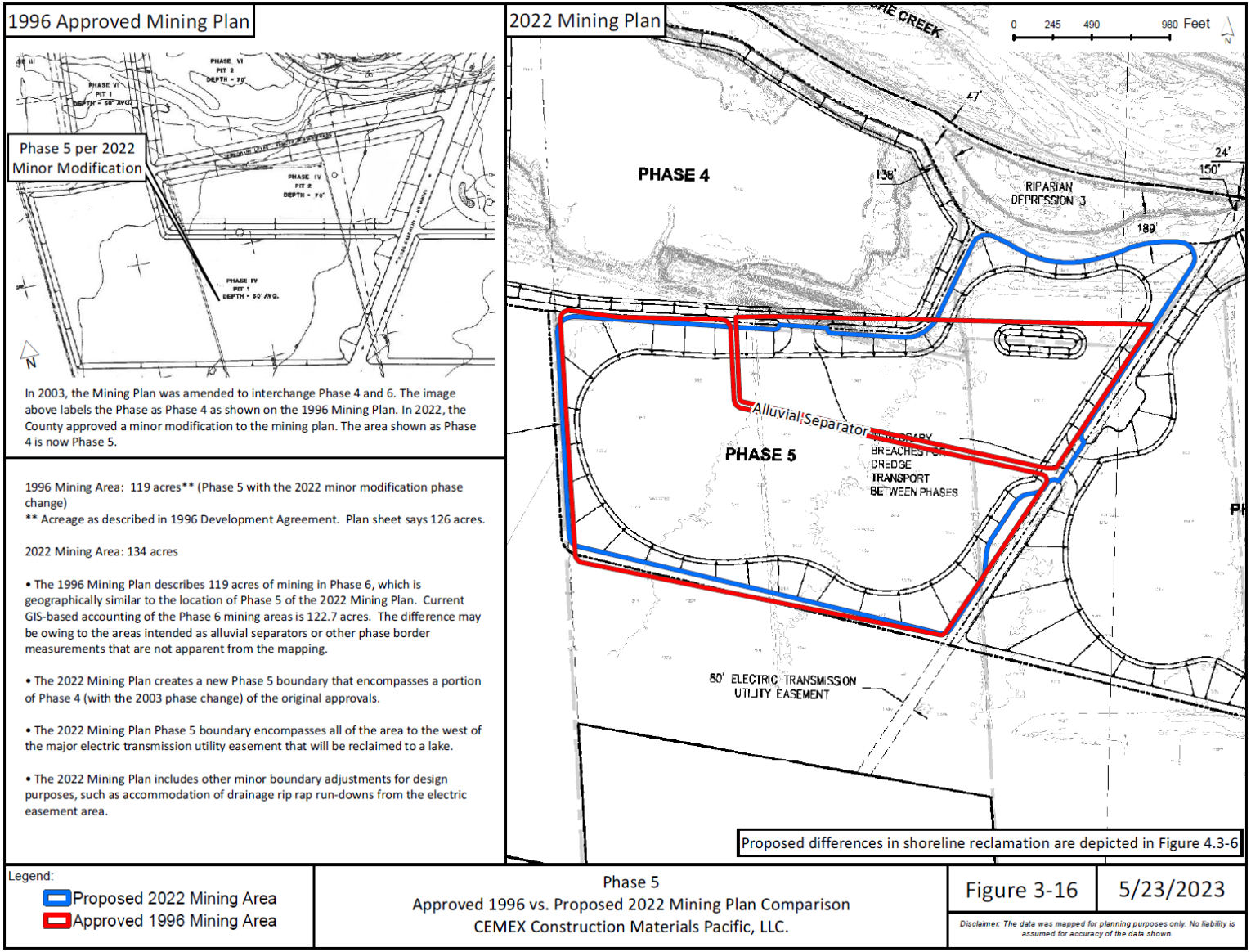


Figure 3-16
Proposed Phase 5 Mining Plan Modifications



CEMEX proposes to leave an unmined "natural" alluvial separator between Phases 4 and 5. The natural alluvial separator would consist of undisturbed, natural ground between existing and future mining pits within Phases 4 and 5 (see Figure 3-5). The purpose of the natural alluvial separator between proposed Phases 4 and 5 is to facilitate backfilling of Phase 4 for a return to agriculture while maintaining a stable[14] separation for the future open water lake in future Phase 5.

- For Phase 6, modify the mining phase boundary resulting in an increase of ±1-acre (from 134 acres to 135 acres) (Figure 3-17, Proposed Phase 6 Mining Plan Modifications). While the approved Development Agreement describes the proposed Phase 6 mining area (originally approved as Phase 5, then changed to Phase 6 in 2022) as 136 acres, the 1995 mining plan sheets label the mining area as 134 acres. Proposed date for final reclamation changed from 2026 to 2048.

- For Phase 7, modify the mining and reclamation plans to remove this Phase entirely.

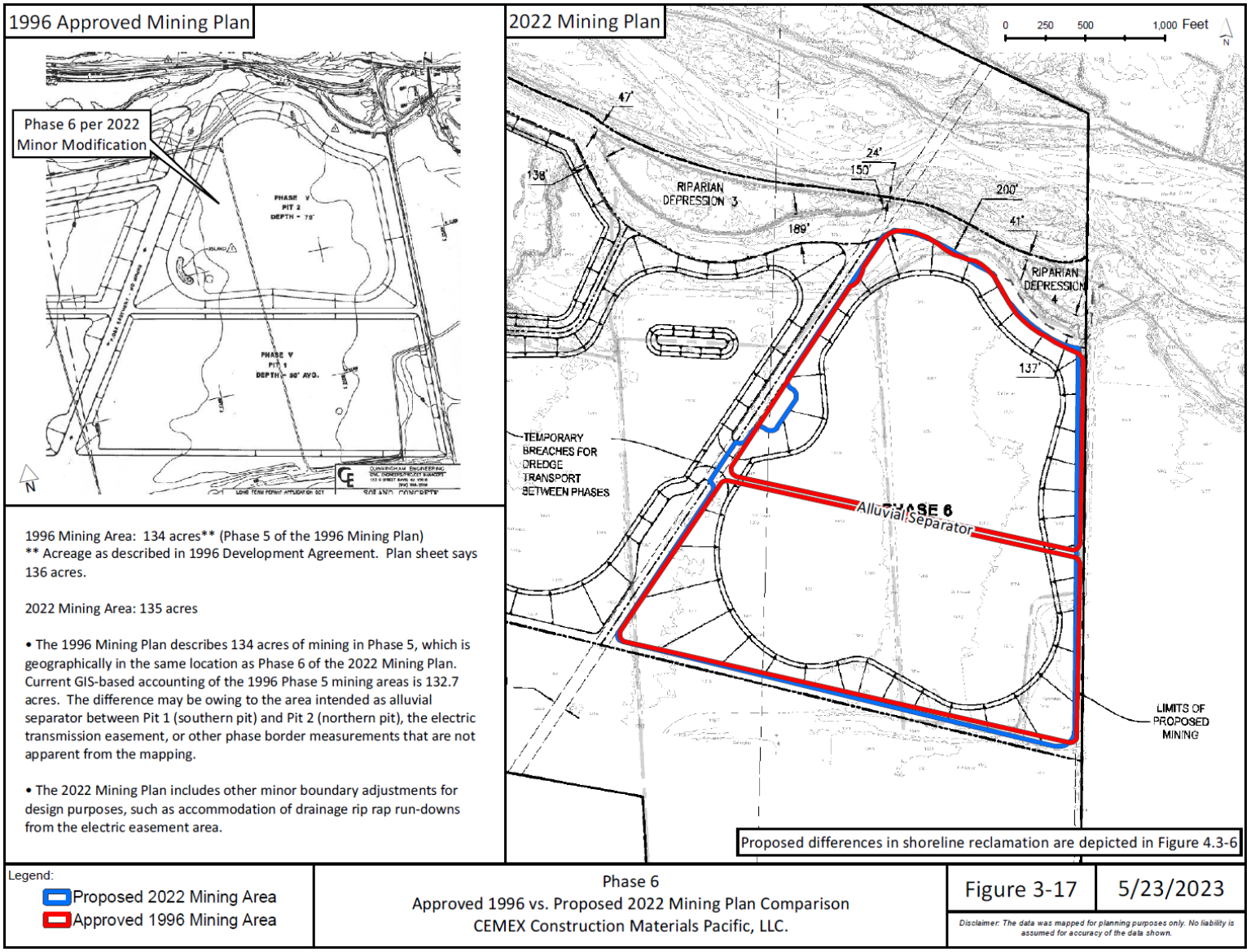
Changes to Reclamation

The applicant proposes a ±100-acre increase in the overall area to be reclaimed (±816 acres proposed versus ±716 acres under existing entitlements) (Figure 3-8), primarily due to the inclusion of areas located between the north boundary of Phases 1 through 6 and the south bank of Cache Creek as part of the proposed revised Reclamation Plan (Figure 3-9). The change in acreage also accounts for elimination of Phase 7 from the project. The change in reclamation acres is not due to any substantial proposed increase in surface disturbance or operating areas. Existing surface mining disturbances in these northerly areas (e.g., access roads, conveyor alignment, soil and overburden stockpiles) are proposed to be included as part of the reclamation plan boundary, pursuant to the requirements of SMARA and County Code. In addition, project acreage calculations are now based on a 2018 property survey and GIS-based digitization of phase boundaries which is more accurate than the prior hand-drawn and hand-calculated boundaries that were used to calculate acreages in 1996 for the existing entitlements.

The project proposes changes to the reclamation plan to increase the lake acreage by ±51 acres; increase in shoreline and other habitat by ±113 acres; decrease reclaimed farmland by ±57 acres; and change the type of agriculture from approximately 50 percent row crop and 50 percent tree crop to approximately 80 percent row crops and 20 percent tree crop. These changes reflect an updated accounting of available soil material that can be used to support reclamation to agriculture following mining activities. The applicant has determined that there will not be enough topsoil and overburden to undertake the amount of reclaimed agriculture originally approved and is, therefore, proposing to increase the lake and habitat areas (and associated land dedication to the County) and decrease the area of reclaimed agriculture.

[14] Slope Stability Evaluation, Geocon, February 2018 (Appendix I of this Draft SEIR)

Figure 3-17
Proposed Phase 6 Mining Plan Modifications



The approved reclamation plans include 61 acres of habitat and the approved HRP includes 166 acres of habitat. The 166 acres is comprised of 74.5 acres of creek restoration and 91.2 acres of natural habitat restoration around the perimeters of the lakes. The proposed project would incorporate all acreage requiring reclamation into the approved reclamation plans, thus aligning the plan sheets with the HRP. The proposed reclamation plans and the proposed HRP both include 174 acres of habitat comprised of the habitat types shown below. This reflects an actual increase of 8 acres (5%) of habitat.

Acres	Habitat
87.0	Oak Savanna
28.6	Native Grassland Buffer
20.7	Riparian Depression
20.1	Riparian Woodland
15.3	Perennial Marsh
2.3	Tree Screen on I-505
174.0	

The following specific reclamation plan modifications are proposed:

1. Add ±100 acres overall to include areas disturbed by mining along Cache Creek and the I-505 buffer areas.

2. Increase the lake area by ±51 acres, increase the shoreline and other habitat by ±113 acres, decrease agriculture by ±57 acres, decrease slopes and roads by ±7 acres, and modify the configuration of reclaimed areas. The modified configuration would decrease the proximity of the reclaimed lakes to the restored riparian habitat along the creek by approximately 2,340 linear feet.

3. Change the agricultural end uses from approximately 50 percent row crop and 50 percent tree crop to approximately 80 percent row crops and 20 percent tree crop.

4. Approximately 67 acres of the 100-acre Hutson parcel that comprises much of Phase 1 was reclaimed in agriculture with active agricultural production from 1989 to 2016. Until recently, this phase has not been under active crop production since that time due to additional overburden and topsoil fill placements made by the operator. However, in 2022 the field was releveled, and drainage improvements were made by CEMEX and Sagara Farms, Inc. Crops were planted in December 2022.

5. Adjust the boundary between Phases 1 and 3, resulting in a ±9-acre decrease in the size of Phase 1 (from 140 to 131 acres).

6. Make changes to the Phase 2 to allow reclamation of the western 31.9 acres to agriculture in the next five years and to use the eastern 31.9 acres as a designated stockpiling and construction material recycling area that would be reclaimed to agriculture (along with the plant site) at the end of the life of the permit.

7. Eliminate proposed reclamation to two lake features in Phases 1, 3, and 4, and replace with reclamation to agriculture.

8. Consolidate all lake features into two large lakes in Phases 5 and 6, with modified configuration. Both lakes would be dedicated to the County to be included in the Cache Creek Parkway after final reclamation.

Consistent with existing approvals, after mining is completed, Phases 2, 3, and 4 will receive backfill for reclamation to agriculture. Phases 5 and 6 will be reclaimed to permanent lakes and will not require backfill (unless necessary to flatten perimeter lake slopes for future habitat value). Where required, backfill with overburden and topsoil will be performed using conventional mobile equipment such as scrapers and bulldozers. Reclaimed (backfilled) agricultural fields will have lowered elevations relative to original ground. However, as required by Reclamation Ordinance Section 10-5.516, the final distance between lowered surfaces reclaimed to agriculture and the average high groundwater will not be less than five feet. Final reclamation, consisting of finish slope reclamation, revegetation and equipment removal will generally commence as soon as final excavation grades are achieved by phase. Figure 3-18 and Table 3-7 below provide a comparison of reclamation end uses and acreages for the current entitlements and proposed Project.

Permit Extension

The approved permits expire August 11, 2027. The applicant proposes to extend this expiration date by 20 years to August 11, 2047. Extension of the mining permit is allowed under Section 10-4.426 of the Mining Ordinance and existing Condition of Approval No. 6. While mining would cease after 2047, final County sign-off on reclamation may not occur for an additional period of three to five years to allow reclamation performance standards to be met. This analysis assumes that all reclamation activities will be concluded by August 11, 2052.

Modified Conditions of Approval

Modify various conditions of approval to reflect the proposed changes and integrate the County's recently completed ten-year permit review.

Development Agreement

The Solano Concrete Long-Term Off-Channel Mining Permit Development Agreement No. 96-287 was approved December 17, 1996 (second reading and recordation on January 7, 1997) pursuant to Yolo County Ordinance No. 1199. It was subsequently amended twice:

1. The first amendment, dated May 22, 2001 (Ordinance No. 1264 and Agreement No. 01-124), expanded the size of the plant site by 0.6 acres to incorporate a relocated batch plant and new office into the existing mining facility.

Figure 3-18
Comparison of Reclaimed Uses

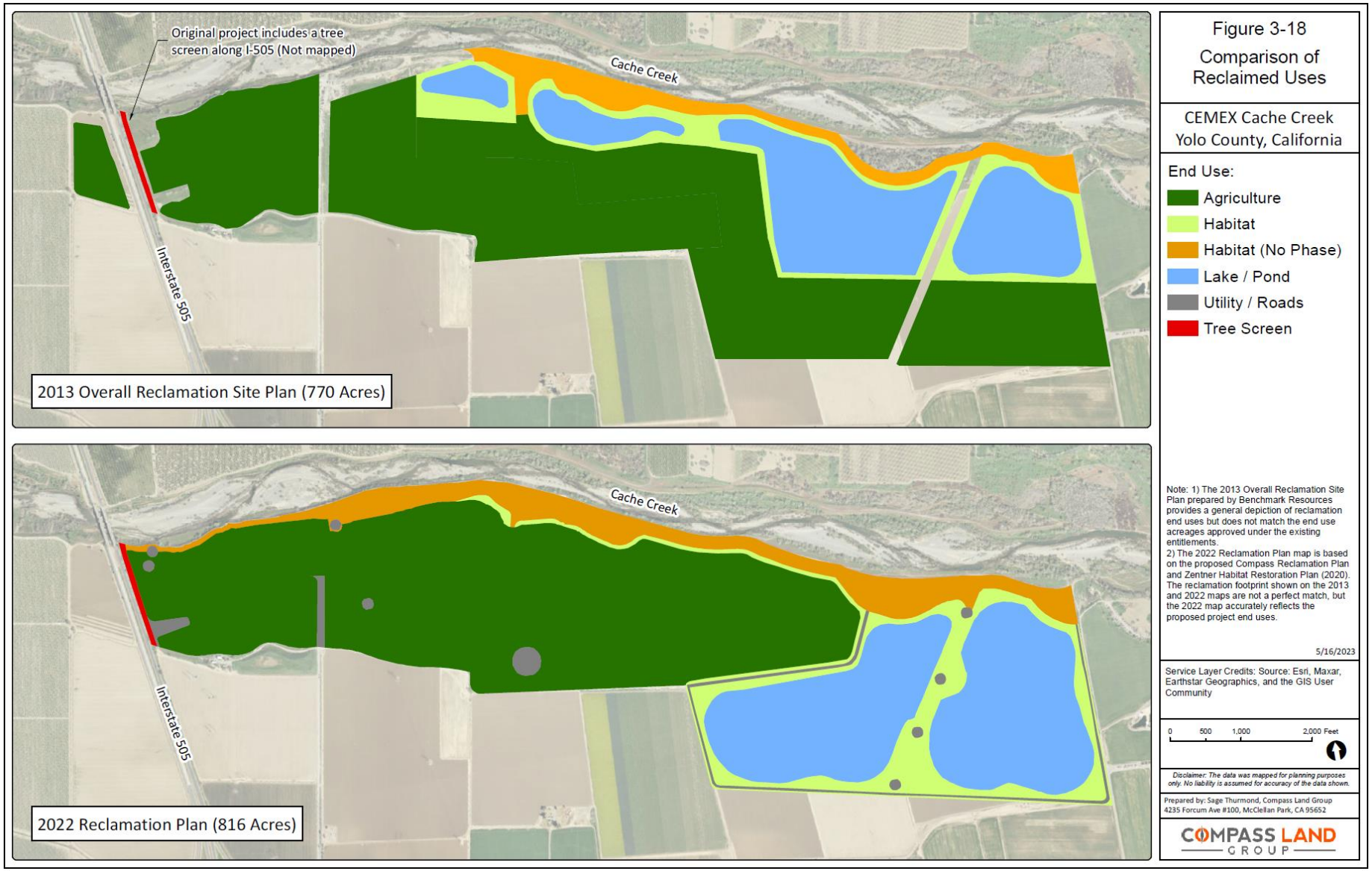


Table 3-7: Reclamation End Use Comparison by Phase

Phase	Agriculture (± acres)	Habitat (± acres)	Lakes (± acres)	Slopes/Roads (± acres)	Total (± acres)
Approved Reclamation[1]					
1	120[3]	3	13 private[6]	4	140
2	61			4	65
3	90	19	17 private	3	129
4	15	9	57 public[6]	3	84
5	67	17	46 public	4	134
6	83	13	20 public	3	119
7	10			5	15
Plant Site	30				30
Total	**476[4]**	**61[8]**	**153**	**26**	**716**
Proposed Reclamation[2]					
1	124.5	5.8		0.4	130.7
2	63.7				63.7
3	91.7	5.4		2.9	100.0
4	111.3	8.1			119.4
5		27.5 (shoreline)[5] 9.4 (other)	102.9 public	5.9	145.7
6		33.2 (shoreline)[5] 7.4 (other)	101.1 public	4.1	145.8
Plant Site	27.4	6.2[9]		1.3	34.9[7]
Creek Setback		68.7			68.7
Other Buffer[10]				4.6	4.6
I-505 Buffer[11]		2.3			2.3
Total	**418.6**	**174.0[8]**	**204.0**	**19.2**	**815.8**
Net Change in Reclamation Acres (Proposed vs. Approved)					
Net Change	**-57.4**	**+113.0[8]**	**+51.0**	**-6.8**	**+99.8**

Source: TSCHUDIN CONSULTING GROUP, January 28, 2023.

Notes:

[1] For Phases 1 through 7, acreages are per Development Agreement No. 96-287 (dated December 17, 1996), Recitals V and VI; as amended for changes to Phases 4 and 6 on April 15, 2003. For Plant Site, acreages are based on March 12, 2014, letter from Yolo County approving *Minor Modification to the CEMEX Reclamation Plan*, which approved reclamation of the 30-acre plant site to agricultural use.

[2] Figure 4 of proposed *Habitat Restoration Plan* (Zentner, October 2022).

[3] Phase 1 reclamation to Agriculture includes 20 acres for Farnham parcel plus 100 acres for Hutson parcel.

[4] Reclamation to Agriculture includes 223 acres identified as "row crop," 223 acres identified as "tree crop," and 30 acres of general agricultural use (the plant site).

[5] Shoreline habitat as described on Figure 4 of proposed *Habitat Restoration Plan* (Zentner, October 2022).

[6] Private = Reclaimed lake remaining in private ownership. Public = Reclaimed lake to be dedicated to County.

[7] As part of the project an additional 4.9 acres is proposed to be reclaimed around the plant site to reflect a more accurate plant site boundary and actual disturbances around the plant.

[8] Approved reclamation plans include 61 acres of habitat; approved Habitat Restoration Plan (HRP) includes 166 acres of habitat. This difference is resolved with the proposed project which would incorporate all acreage requiring reclamation into the approved reclamation plans. The proposed reclamation plans and proposed HRP both include 174 acres of habitat. This reflects an actual increase of 8.0 acres (5%) of habitat.

[9] 3.7 acres oak savanna and 2.5 acres native grassland buffer.

[10] Utilities and roads.

[11] Tree screen.

2. The second amendment, dated April 15, 2003 (Ordinance No. 1299 and Agreement No. 03-54), recognized a change in ownership to Rinker Materials and changed the sequence of mining phases from Phases 4, 5, and 6 to Phases 6, 4, and 5, in order to allow a shorter period of disturbance for Phase 4, faster reclamation, and creation of a larger reclaimed area of lake and habitat upon conclusion of mining.

As a part of the subject project, the applicant proposes a third amendment to the Development Agreement No. 96-287 to comport the agreement and exhibits to requested modifications to the mining permit, reclamation plan (including timing and sequencing of reclamation), and previously negotiated description and timing of public benefits (also referred to as "net gains"), and other relevant project components.

Other Project Characteristics

The applicant proposes no changes to other components of the existing approvals, including maximum depth of mining, maximum annual rate of mining, equipment used for mining and processing, use of settling ponds to contain and settle aggregate wash fines, truck routes, or hours of operation. Each of these aspects of the project is described further below.

Maximum Depth of Mining

As originally proposed and approved in 1996, mining in Phases 1 through 6 would be to an estimated maximum depth of 70 feet. This depth reflects the maximum depth of the feasibly harvestable aggregate resource, and is consistent with Section 10-4.411.1 of the County's Mining Ordinance which encourages excavation to the full depth of available resources at any particular mining site in order to minimize the mining footprint, ensure efficiency in resource extraction, minimize impacts to agriculture, and minimize impacts of water loss associated with evaporation from reclaimed lakes. Page 2 of the Development Agreement documents these maximum depths. The applicant proposes no changes to mining depth as a part of this proposed modification.

Maximum Annual Rate of Mining

The annual production for the mine is currently limited to 1,204,819 tons mined (1,000,000 tons sold). Pursuant to Section 10-4.405 of the Mining Ordinance, the operation has approval to exceed the annual production level by up to 20 percent to 1,445,783 tons mined (1,200,000 tons sold) in any one year, so long as the running ten-year production average does not exceed 12,048,190 tons mined (10,000,000 tons sold). Under no circumstances may annual production exceed 1,445,783 tons mined (1,200,000 tons sold). This limit does not apply to recycled waste material or aggregate obtained from in channel maintenance work performed in accordance with the CCAP. The project proposes no change to these annual tonnage limits.

Mining and Processing Equipment

Mining operations will continue to involve removal of vegetation, topsoil/growth media, and overburden materials that lie above marketable sand and gravel deposits. The overlying materials will be removed using scrapers aided by a motor grader and bulldozer, or excavator and off-road haul trucks, as needed. After overlying materials are removed, marketable sand and gravel will

be excavated using conventional mining equipment such as scrapers, excavators, and bulldozers (for dry mining) and an electric dredge (for wet mining). Following excavation, the sand and gravel will be transported primarily by electric conveyor to the existing aggregate processing plant for washing, crushing, sorting and sale.

Settling ponds (accepting and settling aggregate process wash fines, or silts) have been used at the site since the onset of aggregate processing activities in the 1970's. Portions of Phase 1, which have already been substantially reclaimed to agriculture, were once used as settling ponds. Currently, a small pond in the northeast corner of Phase 1 serves as the active settling pond that receives wash fines discharged from the aggregate processing plant. CEMEX will continue to use this as a settling pond until it reaches its capacity, at which time it will receive a soil cap and be reclaimed to agriculture. To accommodate the need for future pond capacity, CEMEX has constructed an alluvial separator (dike) in Phase 3 (to serve as the new boundary between Phases 3 and 4) in order to re-purpose the Phase 3 area as a long-term settling pond. The Phase 3 and alluvial separator configuration was designed for sufficient capacity to contain the wash fines that are projected to be generated during the life of the project.

Truck Route

Except for local deliveries, trucks leaving the CEMEX plant must either exit the facility via a private driveway west onto SR 16 to Interstate 505 (north or south) or east on SR 16 to Interstate 5 (via SR 16 only). Trucks must stay on the interstate until they have left Yolo County, as there are no designated haul routes for the operation on County roads.

Hours of Operation

Under the CCAP, CEMEX is allowed to operate 24 hours per day, as needed, to meet market and customer demands. The crushing equipment at the plant typically operates during the daytime from 5:00 a.m. to 5:00 p.m., Monday through Friday. The asphalt hot plant, operated by Vulcan, typically runs at night. CEMEX does not typically conduct mining at night; however, load out will occasionally occur at night based on the job requirements. The existing approvals do not impose any restrictions on hours of operation and CEMEX proposes no change to allowed or typical hours of operation.

Employment

Approximately 15 employees are involved with mining and processing at the site. No changes in employment are proposed.

Mining and Reclamation Phasing

Mining phasing is summarized in Table 3-8 below. This table shows only proposed mining that will continue into the future, so no mining activity is shown for Phases 1 through 3 or the Plant site.

Table 3-8: Summary Phasing Table

Disturbance Area	Acres To Be Mined	Approx. Production Tons Sold	Approx. Production Tons Mined	Mining Duration (yrs)	Reclaimed End Uses	Acres of Reclaimed End Uses	Proposed Reclamation End Date
Plant Site	--	--	--	--	Agriculture	35	2048
Phase 1	--	--	--	--	Agriculture	131	2025
Phase 2	--	--	--	--	Agriculture	64	2026 west 2048 east
Phase 3	--	--	--	--	Agriculture	100	2048
Phase 4	114	2,000,000	2,299,000	±2	Agriculture	119	2039
Phase 5	134	10,000,000	11,494,000	±10	Permanent Lake, Wildlife Habitat	146	2034 2048[1]
Phase 6	135	14,000,000	16,092,000	±14	Permanent Lake, Wildlife Habitat	146	2048
Remainder	--	--	--	--	Wildlife Habitat	76	2048
Total	**383**	**26,000,000**	**29,885,000**	**±26**		**816**	

Notes:
[1] Conveyor assembly
-All acreages are approximate.
-Anticipated mining schedule assumes annual production of approximately 1,000,000 tons per year (sold weight).
-Anticipated progression and production is approximate only. Actual timelines and production will vary depending on market and geologic conditions.
-Final reclamation may occur three to five years after anticipated progression of mining and reclamation (e.g., to allow reclamation performance standards to be met).
-Reclaimed end uses also include 19 acres of "Slopes and Roads" in Phases 1, 3, 5, 6, plant site, and remainder areas, as tabulated in the Revised Reclamation Plan Narrative (Appendix E).

Progression of mining and reclamation by year is shown in Table 3-9 below.

Table 3-9: Anticipated Progression of Mining and Reclamation

Area[5]	Mining[3] (Start Date)	Mining[3] (End Date)	Reclamation (Start Date)	Reclamation[4] (End Date)
Phase 1	--	Completed 1996	Underway	2025
Phase 2A (West) Phase 2B (East)	--	Completed 2003[1]	2025 (West) 2047 (East)	2026 2048
Phase 3	Underway	2023	2024	2048
Phase 4	Underway	2024	2022	2039
Phase 5	Underway	2033/2047[2]	2033/2047	2034/2048
Phase 6	2033	2047	2047	2048
Processing Plant Site	--	--	2047	2048
Conveyor Alignment	--	--	2047	2048

Notes: *(notes on continue onto next page)*
[1] Estimate.
[2] After Phase 6 is mined, the Operator will perform limited additional mining in the northern portion of Phase 5 as the conveyor assembly is removed to develop a habitat island as part of reclamation. This work is anticipated to occur in 2047

[3] Anticipated mining duration assumes annual production of approximately 1,000,000 tons per year (sold weight).
[4] Final reclamation may occur three to five years after anticipated progression of mining and reclamation (e.g., to allow reclamation performance standards to be met).
[5] Anticipated progression is approximate only. Actual timelines will vary depending on market and geologic conditions.

Net Gains

"Net gains" are additional public benefits that go beyond CEQA mitigation measures. The provision of net gains is a fundamental component of the CCAP, and a requirement under OCMP Action 7.4-1, CCRMP Action 5.4-1, and Section 10-4.502(i) of the Mining Ordinance.

Action 6.4-7 of the OCMP, and Actions 4.4-10 and 4.4-11 of the CCRMP, require alignment with the Yolo County CCAP Parkway Plan (Figure 3-19, Cemex Snyder Lakes, Cache Creek Parkway Master Plan). The net gains proposed by the applicant are in general alignment with the Parkway Plan. Approved and new proposed net gains features are described below.

Pursuant to Section 2.2.8 of the Development Agreement No. 96-287, the approved net gains for this operation are as follows (Figure 3-20, Approved Net Gains):

1. Lakes and Perimeter Habitat – Dedication of ±150 acres of lake and perimeter habitat after completion of reclamation (estimated to occur in 2032):

    - Snyder West Lake and perimeter habitat = 38.3 acres
    - Snyder West Lake and perimeter habitat = 111.5 acres

2. Eastern Road Easement – Dedication of the following access following completion of reclamation:

    - 40-foot road easement from SR 16 to dedicated Snyder East Lake site = 2.8 acres

3. In-Channel Dedication to Centerline – Dedication of in-channel property following completion of reclamation:

    - Northerly frontage to centerline of creek = ±55 acres

4. In-Channel Restoration – Completion of the following additional restoration:

    - Restoration of 35 acres of previously mined riparian: a) Orrick 20 acres (in Phase 3) to remain in private ownership; and b) Snyder West and East ±14 acres dedicated to County as part of in-channel dedication described above.

Figure 3-19
CEMEX Snyder Lakes, Cache Creek Parkway Master Plan

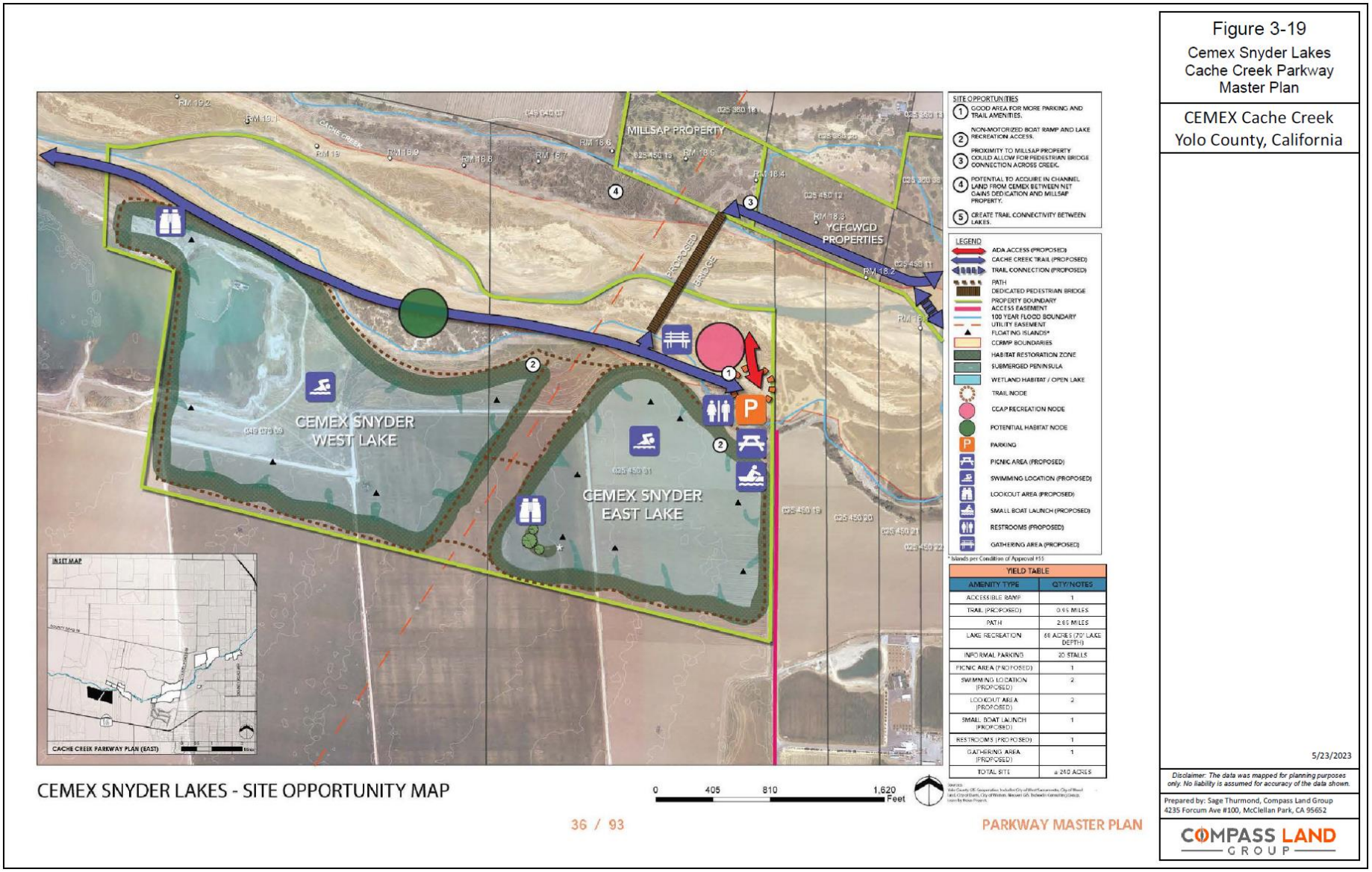
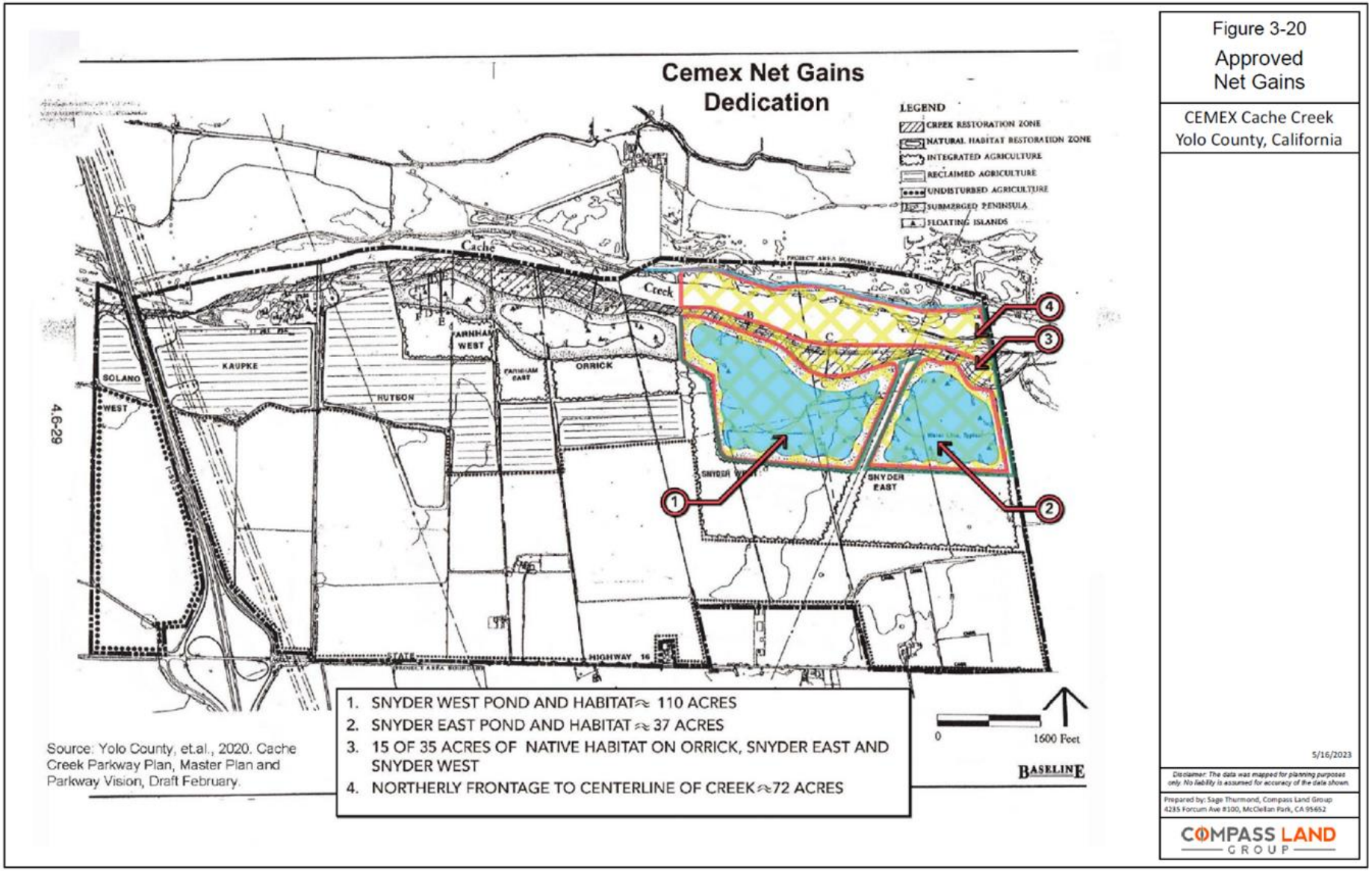


Figure 3-20
Approved Net Gains



CEMEX proposes to modify the approved net gains as follows:

1. Lakes and Perimeter Habitat – Increase the previously identified lake and habitat dedication by an additional ±73.5 acres of lake and perimeter habitat adjacent to Cache Creek (Figure 3-21 (A and B), Proposed New Net Gains).

2. Eastern Road Easement – The easement will be a 40-foot-wide public road and utility right-of-way easement. The easement length will be shorter per the proposed reconfigured lakes. The dedication will include a 12-foot rough-graded (e.g., bladed, drivable) access road from State Route 16 to a rough-graded (e.g., bladed, drivable) turn-around (approximately 90 to 100 feet in diameter), to allow public and County access and sufficient for emergency vehicle use, north of the eastern lake.

3. In-Channel Dedication to Centerline – No change; however, acreage is slightly less than original estimate based on surveying and improved accuracy of mapping.

4. In-Channel Restoration – No change.

5. Dedication of Millsap Connector Property – Dedication in fee of the in-channel portion of the land north of Phase 6, north of the centerline of Cache Creek, to the boundary of the neighboring Millsap property. Total acreage of dedication approximately 12.4 acres.

6. Western Road Easement – Easement dedication of 40-foot-wide public road and utility right-of-way, west of I-505, along property line of former Phase 7, from SR 16 to new Creekside Trail. Allows for public access (proximate to Madison) to creekside trail loop along Cache Creek. The dedication will include a 12-foot rough-graded (e.g., bladed, drivable) access road from State Route 16 to a rough-graded (e.g., bladed, drivable) turn-around (approximately 90 to 100 feet in diameter) to allow public and County access and sufficient for emergency vehicle use in the old Phase 7 area. CEMEX will convey to County for shared (including public) use, any implied, residual, and/or prescriptive rights to traverse under I-505, but such rights shall be non-exclusive and will not impair CEMEX's rights to traverse under I-505.

7. Creekside Trail Easement – Dedication of 40-foot trail easement along south side of Cache Creek from Eastern Road Easement to Western Road Easement. Totals 8.2 acres (8,910 lineal feet). Dedication shall include a minimum 8-foot rough graded (e.g., bladed, drivable) trail connecting between the two road accesses.

8. Cash Donation – $15,000 to the Cache Creek Nature Preserve within one year of project approval.

9. Cash Donation – $5,000 to the County for update of the Cache Creek Parkway Plan documents within one year of project approval.

Figure 3-21A
Proposed New Net Gains

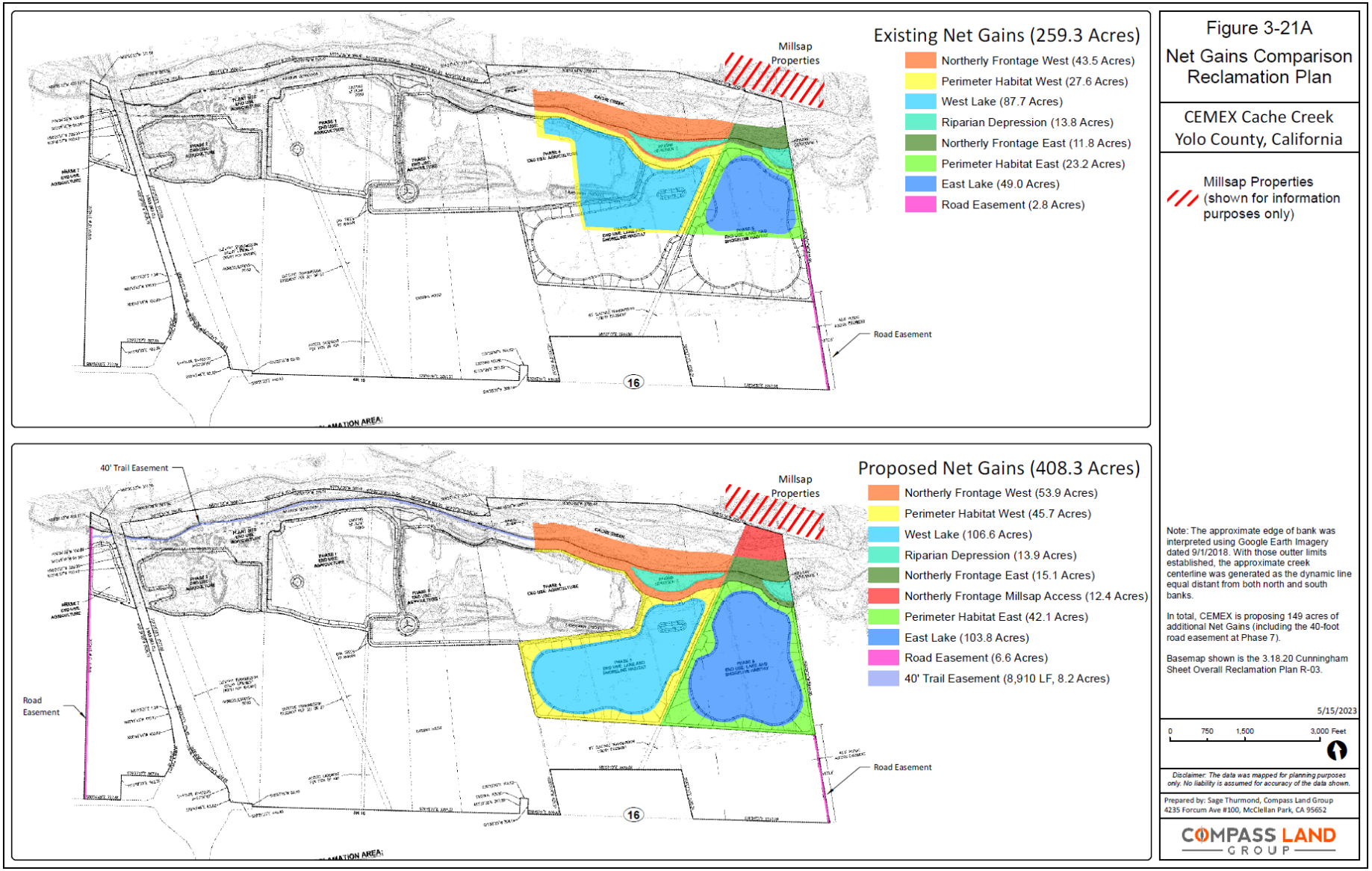
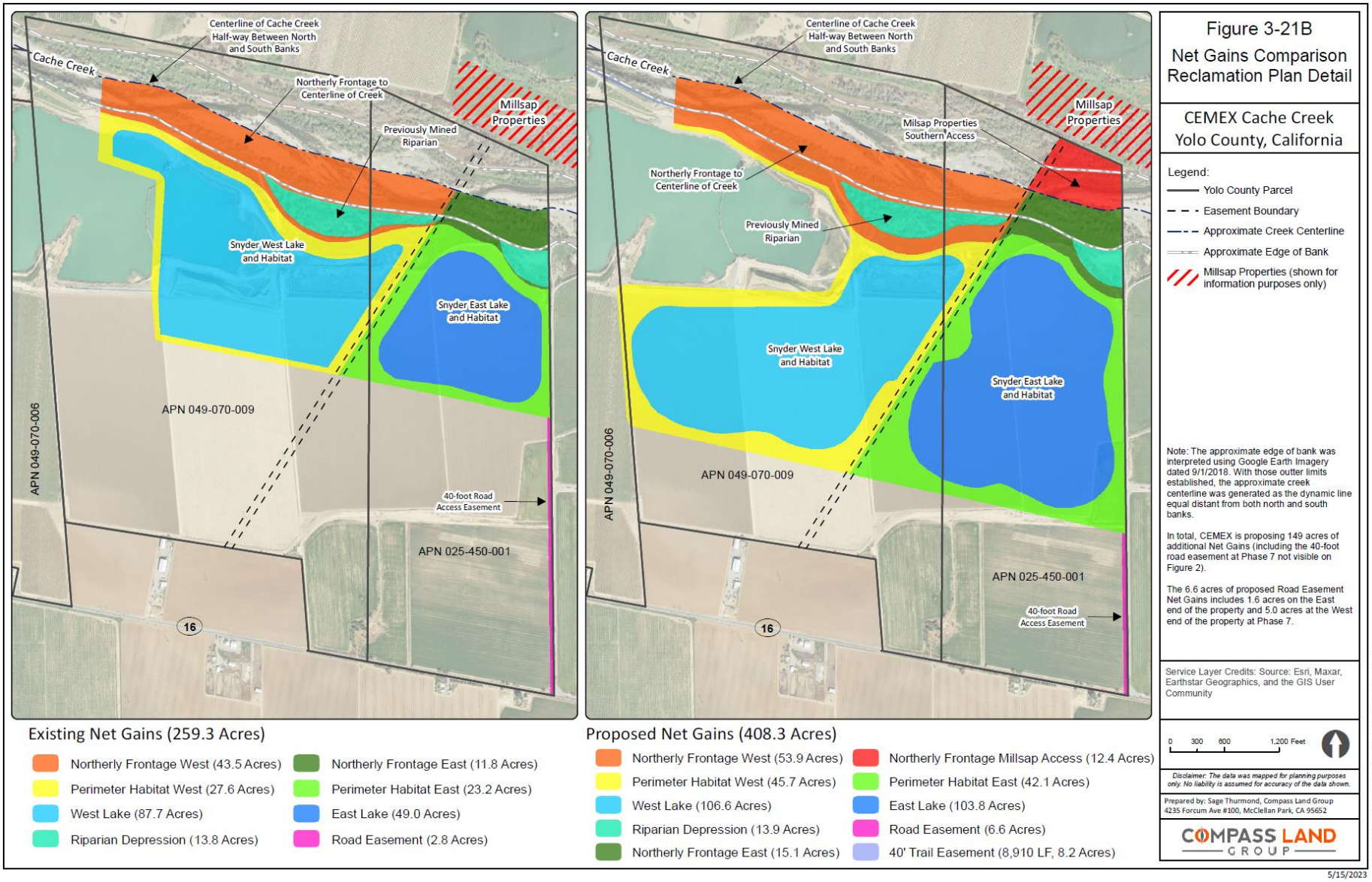


Figure 3-21B
Proposed New Net Gains



New proposed dedication of land ensuring connection to the Millsap Property satisfies identified opportunities and constraints in the Parkway Plan. The Parkway Plan also identifies lake recreation, informal parking, trails, and pathways with which the applicant's net gains proposal is consistent.

3.7 COMPARISON TO APPROVED PROJECT

Proposed changes in the project as approved are summarized in Table 3-10 below. The environmental impacts of these changes are the subject of analysis in this Draft SEIR.

Table 3-10: Comparison of Key Features of Project

Project Component	Approved (Current) Project	Proposed Project	Notes
General Project Information			
Project site area	1,828 acres	1,902 acres	Increase of 74 acres; however, no change in area is proposed. The change in acreage is simply due to more accurate information resulting from a property survey conducted in 2018.
Total aggregate production (mined)	32,170,000 tons	53,536,426 tons	Increase of 21,366,426 tons (66%)
Total aggregate production (sold)	26,700,000 tons	46,636,119 tons	Increase of 19,936,119 tons (75%)
Maximum annual aggregate production (mined)[1]	1,445,783 tons	1,379,310 tons	Estimated decrease of 66,473 tons related to update of waste factor from 17% to 13%.
Maximum annual aggregate production (sold)[1]	1,200,000	1,200,000	No change[5]
Total length of permit approval through end date	30 years (2027)	2047 (50 years)	20-year extension requested
Phases	7 (plus plant site)	6 (plus plant site)	Eliminated Phase 7 located on west side of I-505.
Mining Activities			
Mining area	586 ac. (481 ac. remaining)	647 ac. (470 ac. remaining)	No change
Method of mining	Electric dredge (since 2005)	Electric dredge (since 2005)	No change. Original mining method was drag lines.
Maximum depth	70 feet	70 feet	No change
Truck route	Direct access to SR 16	Direct access to SR 16	No change
Hours of operation	5:00 a.m. to 5:00 p.m. M-F typical; 24/7 allowed	5:00 a.m. to 5:00 p.m. M-F typical; 24/7 allowed	No change
Maximum phase size	114 acre (Phase 4)	201 acres (Phases 3 + 4)	Increase of 87 acres
Reclamation Activities			
Reclamation area	716 acres	816 acres	Increase of 100 acres previously disturbed along the creek and I-505
Area reclaimed to agriculture	476 acres	419 acres	Decrease of 57.4 acres
Row crop/tree crop split	50% / 50% 223 acres / 223 acres	80% / 20% 334 acres / 85 acres	Increase of 50% (+111 acres) row crops;

			Decrease of 62% (-138 acres) tree crops
Area reclaimed to habitat	61 acres (on plan sheets) 166.0 acres (in HRP)	174 acres	Approved reclamation plans include 61 acres of habitat; approved Habitat Restoration Plan (HRP) includes 166 acres of habitat. This difference is resolved with the proposed project which would incorporate all acreage requiring reclamation into the approved reclamation plans. The proposed reclamation plans and proposed HRP both include 174 acres of habitat. This reflects an actual increase of 8.0 acres (5%) of habitat.
Area reclaimed to lake	153 acres	204 acres	Increase of 51 acres[7]
Number of lakes	4	2	Decrease in total number of lakes
Area reclaimed to slopes and roads	26 acres	19 acres	Decrease of 7 acres
Contiguity of reclaimed lakes to creek	3,740 linear feet	1,400 linear feet	Decrease of 2,340 linear feet
Net Gains			
Dedication of two lakes and perimeter habitat	±187.5[2] acres in ±2032	±298 acres in ±2052	Dedication of ±73.5 more acres of lake and ±37 more acres of perimeter habitat; dedication of Snyder lakes delayed approximately 20 years
Dedication of 40-foot access road easement (on east side)	±2.8 acres in ±2032	±1.8 acres in ±2052	Shortened access because lake is closer to SR 16. Dedication of access delayed approximately 20 years – will be included with dedication of Phase 6 lake
Dedication of creek frontage from lakes to centerline of creek	±55[4] acres in ±2032	±69[3] acres in ±2052	Area of creek frontage to be dedicated increased by 14 acres. Time of dedication delayed 20 years, except for portion adjoining Phase 6 lake.
Dedication of ±15 acres of riparian restoration	±14[6] ac in ±2032	±14[6] ac in ±2052	In conjunction with final reclamation. Dedication delayed 20 years
Dedication of land between creek centerline and Millsap property	N/A	±12.4 acres in ±2052	New dedication to Parkway in conjunction with dedication of Phase 6 lake
Dedication of new 40-foot access road easement from west side of prior Phase 7 to SR 16	N/A	±4.8 acres in ±2052	New creek access for Madison community
Dedication of 40-foot trail easement from public	N/A	±8.2 acres in ±2052	New trail connection along Parkway within one year

access on west side to net gains dedications on east side			of reclamation of plant site.
Contribution of various cash donations	N/A	Various	Additional $20,000 in program funding, within one year of project approval.

Source: TSCHUDIN CONSULTING GROUP, May 16, 2023.
Notes:
[1] This includes the previously approved 20 percent exceedance allowed under Section 10-4.405 of the County Mining Ordinance
[2] This acreage has been updated to reflect digitization of the original net gains commitments and therefore differs from acreages in the executed Development Agreement which were estimated based on less accurate mapping methods.
[3] Separate from ±14 acres of riparian restoration and ±12 acres between the creek centerline and the Millsap property.
[4]This acreage was incorrectly estimated as approximately 78 acres in the 2019 Cache Creek Parkway Plan Baseline Inventory.
[5] The 647 acres includes 116 acres in Phase 1. The 1996 approvals included only 40 acres in Phase 1. 116 ac. – 40 ac. = 76 acres. 586 ac. + 76 ac. = 662 acres. 662 ac. – 15 ac. (elimination of Phase 7) = 647 acres. Therefore, no change. The remaining 470 acres includes the full 87 acres of Phase 3, although only minor cleanup work remains in Phase 3 (which should be completed next year).
[6] Change from 15 acres to 14 acres due to discrepancies in mapping – boundaries are unchanged. This acreage is separate from the 55-acre dedication comprised of the creek frontage to centerline.
[7] The Development Agreement references 153 acres for the total size of the four lakes. Based on digitization, the actual acreage approximately 146 acres. Increase based on digitization is approximately 58 acres.

3.8 PREVIOUS ENVIRONMENTAL REVIEW

Project FEIR

The Solano Long-Term Off-Channel Mining Permit Application FEIR (SCH #96012034) was certified by the Board of Supervisors on November 25, 1996. This was a comprehensive EIR analyzing all topics required under CEQA at the time with the exception of population and housing, energy and mineral resources, and public services and utilities (which were identified in the initial study as being unaffected by the project).

All identified mitigation measures (with changes to Mitigation Measures 4.3-4c, 4.6-5a, and 4.6-5b as reflected in the conditions of approval), were incorporated into the conditions of approval for the approved operation (Mining Permit No. ZF #95-093 and Development Agreement No. 96-287). The following impacts were identified at the time as significant and unavoidable:

- Permanent conversion of agricultural land (Impact 4.5-2)
- Cumulative loss of agricultural land (Impact 4.5-8)
- Inconsistency with Yolo Resource Conservation District agricultural policies (Impact 4.2-6)
- Increases in PM 10 emissions in excess of thresholds (Impact 4.7-1)
- Increases in ozone precursors emissions (Impact 4.7-2)
- Effect on attainment of local and regional air quality goals (Impact 4.7-3)

- Effect of archeological resources (Impact 4.11-2)

There were also various cumulative impacts identified at the time in the companion 1996 OCMP Program FEIR as follows:

- Permanent loss of agricultural land
- Temporary loss of agricultural productivity
- Cumulative loss of productive agricultural land
- Emission of PM 10
- Emissions of ozone precursors (ROG and NOx)
- Cumulative impacts to air quality
- Increase in vehicle trips
- Impacts to views or vistas

CCAP Update FEIR

The Cache Creek Area Plan (CCAP) Update FEIR (SCH # 2017052069) was certified by the Board of Supervisors on December 17, 2019. This was a comprehensive EIR analyzing all topics required under CEQA with the exception of land use and planning, population and housing, public services, recreation, and utilities and services systems (which were identified in the initial study as having no significant effect resulting from the project). All identified mitigation measures were incorporated into the updated CCAP plans and regulations which are applicable to the proposed project. The following impacts were identified at the time as significant and unavoidable:

- Cumulative aesthetic impacts (Impact CUMULATIVE AES-1)
- Conversion of protected farmland (Impact AG-1)
- Cumulative loss of farmland (Impact CUMULATIVE AG-1)
- Conflict with applicable air quality plan (Impact AIR-1)
- Violation of air quality standards (Impact AIR-2)
- Cumulative air quality impacts (Impact CUMULATIVE AIR-1)
- Increased GHG emissions (Impact GHG-1)
- Cumulative GHG emissions (Impact CUMULATIVE GHG-1)

- Cumulative roadway noise (Impact CUMULATIVE NOI-1)
- Cumulative transportation impacts (Impact CUMULATIVE TR-1)

3.9 REQUIRED APPROVALS FROM YOLO COUNTY

The proposed project would require the following County approvals:

- Certification of a Subsequent EIR prepared pursuant to Section 15162 of the CEQA Guidelines (Subsequent EIR).
- Amendment to Mining Permit No. ZF #95-093 to:
    - Allow mining to continue on ±383 acres (Phases 4 through 6) for an additional 20 years through the year 2047.
    - Approve revised Mining Plan sheets reflecting modified mining phase boundaries, elimination of Phase 7, increased acreage that can be simultaneously disturbed, and increased acreage that can be used for processing.
    - Approve increased the total production limit from 32,170,000 tons mined (26,700,000 tons sold) over the term of the permit to 53,536,426 tons mined (46,636,119 tons sold).
    - Modify various conditions of approval to reflect the final approved changes.
- Amendment to the approved Reclamation Plan to:
    - Modify reclamation area to reflect ±816 total acres reclaimed to ±419 acres of agriculture (approximately 80% row crops and 20% tree crops), ±204 acres of permanent lakes, ±174 acres of riparian and other habitat, and ±19 acres of slopes and roads.
    - Allow a longer period for reclamation by phase and overall, with all reclamation completed by 2052.
    - Approve revised Reclamation Plan sheets, Reclamation Plan narrative, and Habitat Restoration Plan.
- Amendment to Development Agreement No. 96-287 to reflect the revised mining and reclamation approvals and net gains.

3.10 REQUIRED APPROVALS FROM OTHER AGENCIES

- State Department of Conservation, Division of Mining and Reclamation – Review of proposed amendments to the Reclamation Plan.

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