

12 Appendix C – Technical Memoranda

12.8 Landfill Compatibility

Eagle Mountain Pumped Storage Project – Landfill Compatibility

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April 8, 2009, revised November 24, 2009 and August 13, 2012

The Eagle Mountain Pumped Storage Project will be constructed at the site of the Eagle Mountain Mine, which is no longer operational as an iron mine. Certain features of the pumped storage project will be located on lands that have also been designated for construction of a municipal landfill operation. This memorandum addresses the potential conflicts between the landfill project and the pumped storage project, and provides an assessment of the compatibility of the two projects and how potential conflicts are proposed to be addressed.

Figure 1 presents the pumped storage facilities as they were depicted in the Draft License Application (DLA) dated June 22, 2008. Based on that presentation and comments on the DLA offered by Kaiser Eagle Mountain LLC and Mine Reclamation LLC (the landfill proponents collectively called “Kaiser”) and the Los Angeles County Sanitation District No. 2, FERC requested Eagle Crest Energy Company (ECE) to include in its Final License Application (FLA) documentation to support the conclusion that the landfill project and the pumped storage project are compatible (i.e., neither project would interfere with the construction or operation of the other) as stated in the FLA (see FERC letter dated September 15, 2008).

Comments on the DLA provided by Kaiser in a letter dated September 12, 2008, identify a number of perceived conflicts between the pumped storage project and proposed landfill operations and ancillary facilities of the landfill as follows:

- *Pumped storage facilities would hinder or prohibit development of the truck marshalling yard and portions of the rail yards.*
- *The above-ground transmission line from the underground powerhouse to the Eagle Mountain switchyard would reduce Phase 3 landfill disposal capacity.*
- *The pumped storage project tunnels are aligned below the landfill Phases 2, 3 and 4 and could affect landfill liner integrity.*
- *The use of fine tailings from the mine for lining of the proposed reservoirs to control seepage may conflict with use of these fine tailings for the landfill.*
- *The DLA did not indicate how interference and compatibility issues will be addressed and does not credit the advanced design level (estimated to be 70% complete) for the landfill project relative to re-securing approvals if the landfill designs are changed to accommodate the pumped storage project.*

- *Implementation of the landfill project is part of the overall plan for reclamation of the Eagle Mountain mine site. Implementation of the pumped storage project would not be consistent with the plan of reclamation.*

Based upon the analysis undertaken in response to these comments, design of the pumped storage project has been adjusted to avoid or better manage potential conflicts. This memorandum documents these design changes and presents the supporting analysis to demonstrate compatibility of the two projects. This technical memorandum was initially prepared using landfill design drawings dated December 1993. The 2011 update of this TM was prepared using a landfill design drawing dated October 27, 1997.

Conflicts at Truck Marshalling and Rail Yard

The truck marshalling and rail yard facilities for the landfill are located on the east end of the mine site, as shown on Figures 2 and 4. In the DLA, ECE had indicated that construction staging and lay-down areas required for pumped storage project construction would be located close to the truck marshalling and rail yard. These areas have been relocated to a parcel southwest of the lower reservoir and outside of the proposed landfill, as shown on Figure 2.

Transmission from Powerhouse to Eagle Mountain Switchyard

The DLA showed the low-voltage cable connection from the powerhouse to the Eagle Mountain switchyard as an above-ground line. The transmission lines connecting the transfer station and the switchyard were originally placed above ground through the Phase 3 portion of the landfill project. This layout (from the DLA) is shown in Figure 1. The line would have extended from the top through a vertical cable shaft, above ground to the switchyard. ECE now intends to route the low-voltage cables from the underground powerhouse through the underground powerhouse access tunnel (Figure 2). The transmission cables would only be located above ground from the access tunnel portal near the lower reservoir, along the north rim of the reservoir and adjacent to the proposed water pipeline from the reverse osmosis treatment plant to the lower reservoir. The water treatment facilities have also been relocated from the location shown in the DLA to address concerns raised by the Metropolitan Water District (MWD) of Southern California.

The proposed FLA pumped storage layout, shown on Figure 2 (with proposed finished landfill contours), aligns transmission lines within the access tunnel where they will be protected from moisture, down to near the lower reservoir inlet structure. Here, the lines will run up through a shaft to the ground surface and then continue on to the Eagle Mountain switchyard as overhead transmission lines. Cables will run from each of the four 500/18 kV, 135 MVA transformers through the access tunnel and then above ground on towers to the switchyard. The total length of each cable will be approximately 10,000 feet and each will be rated as indicated for the transformers. The cable runs in the tunnel will be approximately 6,000 feet long and above ground the length will be approximately 4,000 feet. A profile view of this alignment is shown in Figure 3, FLA Layout – Cross Section.

Pumped Storage Tunnel Located Beneath the Landfill

The pumped storage facilities are located primarily underground at depths ranging from 100 to 1,500 feet below the existing ground surface and the proposed bottom liner for the landfill. This relationship is shown on Figure 3, which presents cross-sections showing the relationship between the tunnels and the landfill.

For project planning and to assure conservative estimates of project cost, we have assumed that the water conveyance tunnels for the Pumped Storage Project will be concrete-lined throughout, except for the steel-lined penstock and draft-tube tunnels. Depending on actual

rock conditions and hydraulic requirements determined during final design and construction, it may be feasible to only line the tunnels at certain locations where seepage potentials are high. Much of the deeper portions of the pumped storage project will be located above the current water table, which is at El. 700 throughout most of the project area.

Kaiser's concerns with the water conveyance tunnels relate to the potential for seepage from the tunnels to impact the landfill liner system. The lower pressure tunnel and tailrace tunnel will be located generally 1,000 – 1,500 ft below ground, far beneath the landfill liner. Maximum operating pressure within the main conveyance tunnel will be approximately 700 psi. Final tunnel design will need to carefully consider water pressures acting on the tunnels in both directions when the tunnels are fully pressurized for hydroelectric operations and when they are dewatered for inspection. The final designs for the tunnels and associated tunnel linings will assure that no potential will exist for water from the project to cause uplift loads on the landfill liner system.

Concerns were expressed by LA Sanitation regarding possible buildup of methane gas in the water conveyance tunnels. This is not expected to be an issue due to the continuous "flushing" operations of the tunnel that will not allow for methane gas buildup. Security concerns were also brought up by LA Sanitation. All of the hydroelectric facilities will be below ground, with the exception of the overhead transmission line southwest of the lower reservoir to the Eagle Mountain switchyard. Access to shafts, access tunnels and pressure tunnels will be secured. Above ground facilities will follow the same security requirements as the landfill project for their construction activities and operations.

Potential for Reservoir Seepage to Impact the Landfill

Concerns have been expressed that seepage from the upper reservoir and from the water conveyance tunnels could potentially impact the landfill. Studies by GeoSyntec (1996) indicate that the natural groundwater flow is initially to the south from the area of the central pit. Those studies also indicated that because of fractures in the bedrock, seepage will occur, particularly if the reservoir is not treated to control the rate of seepage. Therefore, the proposed pumped-storage operations may artificially raise groundwater levels in this local area. In the case of consistently high reservoir levels and efficient interconnectivity of bedrock fractures to the south, there is potential that this groundwater could exit on the hillside south of the upper reservoir, rather than staying beneath the existing ground surface and the landfill. With the landfill proposed to be constructed south (down-gradient) of the upper reservoir, this groundwater could potentially encounter the lining of the landfill.

The potential and timing for groundwater to migrate to the southern slope is dependent on the local hydraulic conductivity of the rock and project operations. The fact that the reservoir will be filled and drained on a weekly basis will have a dampening effect on the rate of seepage, however, assuming a hydraulic conductivity of 650 feet per year as suggested by GeoSyntec's work, it appears that seepage could intersect the southern slope under long-term steady-state assumptions.

The following engineering investigation will be undertaken to determine the actual potential for seepage and to control its rate from the upper reservoir:

- The upper reservoir (east pit) will be thoroughly investigated during final design of the pumped-storage project to identify a program for seepage control. This investigation will include geologic mapping to identify the locations and extent of faults, cracks, fractures, and discontinuities in the rock formations and subsurface explorations to characterize the hydraulic conductivity of the rock formations. The mapping will identify locations that will

tend to be the areas where seepage into the bedrock will be most pronounced. A seepage model will then be developed to characterize the flow patterns and potential seepage rates through the bedrock with the upper reservoir at its maximum normal pool (El. 2,485).

Based on the above studies, a seepage control and recovery program will be developed. This program will include:

- Curtain grouting beneath the footprints of the two upper reservoir dams. (Foundation grouting typically is performed for dam safety reasons as a means of uplift control). Grouting and/or shotcrete treatment of the surface features identified in the reservoir as likely locations for seepage to concentrate.
- Installation of monitoring wells and piezometers so that seepage amounts and flow patterns can be understood and addressed as necessary over the long term. (Seepage monitoring wells and recovery wells are described in the technical memorandum on seepage modeling.)
- Installation of seepage recovery well(s) both up-gradient and down-gradient of the landfill prism to maintain groundwater levels below the landfill liner. Seepage recovery wells will be installed at the time of project construction so they will be fully functional if and when seepage from the reservoirs is detected. Phase 1 of the landfill is most proximal to the seepage from the Upper Reservoir. Since the Pumped Storage Project will be constructed before the landfill, the seepage monitoring and recovery wells will be in place before Phase 1 of the landfill is constructed, insuring that the landfill is protected.
- Other measures, such as use of impervious blanketing on portions of the reservoir bottom and sides, may also be used depending on results of detailed studies during final engineering design.

The water surface elevation in the Lower Reservoir will range from elevation 925 and 1,092 feet msl. The landfill is proposed to be constructed in four phases. Phases 1 through 3 will be constructed at elevations above the lower reservoir's maximum water surface elevation and therefore cannot be affected by the seepage from the lower reservoir. Phase 4 is located to the north of the lower reservoir and its foundation finish grade at its lowest point is about 1,040 feet msl (about 800 feet from the reservoir), below the maximum reservoir water surface. This portion of the landfill is being built at least in part over the older alluvium exposed in the eastern portion of the Lower Reservoir, however the area is currently covered by tailing piles so the exact extent of the alluvium is unknown.

The groundwater model covered this area and can approximate the change in the groundwater level beneath this portion of the landfill. Groundwater levels directly beneath the reservoir, if not controlled by seepage recovery wells, would be expected to rise a maximum of 8 feet. Existing monitoring well MW-1 is the closest monitoring well in the alluvium to Phase 4. The groundwater elevation in well MW-1 was 706 feet msl in 1992. The water surface elevation with uncontrolled recharge mounding, projects to be about 714 feet elevation, far below the landfill foundation. With seepage control wells, as shown on Figure 16, groundwater levels are expected to change by about one to four feet.

Use of Fine Tailings for Reservoir Seepage Control

The fine tailings remaining from mine operations may be a good source of lower permeability material for lining the reservoir bottoms to help control seepage. Kaiser intends to use a fairly large quantity of these fine tailings for the landfill. Should a potential shortage develop,

reservoir bottom lining for seepage will be accomplished using the portion of the fine tailings that is not needed by the landfill, coupled with imported materials, materials processed on-site that provide sufficiently low permeability, or combinations of all three. During final design, ECE's consultants will work with Kaiser to understand materials availability and to tailor reservoir design to achieve goals without adversely impacting the landfill.

Resolution of Project Compatibility Issues

ECE is committed to successfully resolving all issues of compatibility between the two projects. ECE has attempted to address capability issues with the assumption that the landfill project will be constructed as configured on the most recent set of drawings we have obtained (dated December 1993) with no adjustments to accommodate the pumped storage project.

Based on an overlay of the two projects (Figure 2) and with changes to the pumped storage facility locations described above (DLA to FLA), it appears that the proposed landfill and proposed pumped storage project have insignificant potential conflicts. During final design of the pumped storage project, ECE is committed to meet with Kaiser to review design and construction issues and resolve concerns over conflicts, with the current 70% level design documentation for the landfill serving as the "baseline".

We believe that the existing and proposed roads within the landfill can be utilized by both projects if construction were to occur simultaneously, although simultaneous construction of both projects is unlikely. This will require close coordination and communications between all parties. The landfill haul roads along the perimeter of the project area could be used to move equipment for pumped storage construction and as construction access roads. The existing internal access road running through the northern portion of landfill Phases 2 and 3 may be used to access the pumped storage surge tank and shaft until the north perimeter maintenance road is completed.

The staging, storage, and office/administrative areas for the pumped storage project construction are proposed to be located to the southwest of the lower reservoir, in close proximity to the landfill project's proposed administration buildings. South of this area is the proposed desalination works. The proposed water treatment plant and brine disposal ponds will be accessed using existing roads, and crossing over the Eagle Mountain railroad track system will not be required.

Kaiser's concern with the impacts of the use of rock resources (more specifically within the area of section 36, T14E, R3N) does not appear to be a conflict between the two projects. This area along with other rock pile areas, will not limit access, construction or maintenance for either project. There are no proposed pumped storage project facilities planned to be located on or near this area.

Landfill Use of the East Pit

Landfill Phases 1 through 4 will extend over a period of 85 years, under Kaiser's current projections. In order to operate the landfill for more than 85 years, Phase 5 would be required. The lower reservoir for the pumped storage project (using the East Pit) overlaps with Phase 5. However, the Eagle Mountain landfill was approved by Riverside County for a 50-year operation, and Phase 5 is not a part of the County-approved landfill project. Therefore, there is no conflict between the landfill and the pumped storage project over the use of the East Pit unless and until Phase 5 of the landfill is approved.

The operating license for the pumped storage project from FERC is also proposed to be for a period of 50 years, at which point the project will either be relicensed or retired. Therefore, it is

fair to leave the decision of the best use of the east pit to a future generation if relicensing is proposed and a conflict with future landfill operations is encountered.

Landfill Timing Compatibility Issues

The timing of construction of the landfill project is not known at this time. Under present conditions, construction of the pumped storage project is very likely to be completed before the start of the landfill project and construction of facilities required to support landfill operations.

If all approvals for the landfill were resolved in 2012, then construction of support facilities for the landfill could begin when designs were finalized, and commercial landfill operations could theoretically begin as early as 2016. However, we believe this is an unlikely scenario based upon the recent Ninth Circuit Court decision remanding the legal dispute for further review, review of current and projected demand for landfill capacity in southern California, the bankruptcy filing of Mine Reclamation, LLC, and the recent opening of the Mesquite Regional Landfill. Therefore, as discussed in greater depth below, it is highly unlikely that the landfill project and the pumped storage project construction periods will overlap.

One component of the landfill proposal is an exchange of lands between Kaiser and the Bureau of Land Management (“BLM”). Approval of the landfill is contingent upon Kaiser being the fee owner of the property (See Development Agreement No. 64 Section 2.2; California Integrated Waste Management Board resolution 1999-624 (revised); and California Integrated Waste Management Board, Board Meeting Summary December 14-15, 1999). Therefore, until the land exchange is effectuated, the landfill is not a formally approved operation.

On September 25, 1997, BLM issued a Record of Decision approving the land exchange between itself and Kaiser, which was appealed to the Interior Board of Land Appeals (“IBLA”). On September 20, 1999 the IBLA issued an order denying the appeal and affirming the land exchange. This decision was subsequently appealed to the District Court who decided that “*The subject land exchange and grants of rights of way and reversionary interest are set aside and the Defendants are enjoined from engaging in any action that would change the character and use of the exchanged properties...*” until they complied with the changes requested by the decision. *Donna Charpiet et al., v. United States Dept. of Interior et al.*, ED CV99-0454 RT (Mcx) (Sept. 20, 2005); *Nat’l Parks and Conservation Assoc., v. Bureau of Land Mgmt, et al.*, ED CV 00-0041 RT (Mcx) (Sept. 20, 2005).

This case was appealed to the Ninth Circuit Court of Appeals, and oral argument was heard on December 6, 2007. A decision on the case was published November 10, 2009, and the case was remanded for further proceedings consistent with the Ninth Circuit opinion. The U.S. Supreme Court declined to hear Kaiser’s appeal of the Ninth Circuit decision. According to Kaiser’s Quarterly Report to the Securities and Exchange Commission (dated May 2011), “the adverse federal litigation jeopardizes the viability of the current Landfill project. In addition such decision may adversely impact the agreement to sell the Landfill Project to the [Los Angeles County Sanitation] District, including termination of the agreement.”

According to the Quarterly Report, “If the land exchange litigation is not ultimately favorably resolved and/or the Company cannot otherwise cure various alleged title and other closing issues in a timely fashion, then the [Los Angeles Sanitation] District’s purchase of the Landfill Project would not be completed and the Company might have to abandon the Eagle Mountain Landfill Project and its investment in MRC. The adverse federal litigation materially increases the possibility of such a scenario.”

The Quarterly Report additionally states that, "With regard to the Landfill Project, we are evaluating the time and money necessary to pursue a fix through the BLM. This fix process would ultimately include the federal courts reviewing the adequacy of the fix. A fix through BLM and the likely court review would take several years once the fix is formally initiated. Due to the results of the federal litigation and if there is not a successful fix through the BLM, it is a possible [sic] that there ultimately may not be a viable landfill project."

On October 31, 2011 Mine Reclamation LLC, filed a voluntary petition for relief under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for Central District of California, Riverside Division, bankruptcy case number 6:11-bk-43596 . According to Form 8-K filed by Kaiser Ventures with the Security and Exchange Commission, dated October 31, 2011, Mine Reclamation will continue to operate its business as a "debtor in possession" under the jurisdiction of the Bankruptcy Court and in accordance with the applicable provisions of the Bankruptcy Code, Rules and orders of the Bankruptcy Court. Kaiser Ventures LLC owns approximately 84.247% of Mine Reclamation. In a press release issued on October 31, 2011, Mine Reclamation stated that "the future of the [Eagle Mountain] site and its potential for job creation and funding for Riverside County and the future for Kaiser's retired steel workers are all more uncertain than ever."

Therefore, while it is not possible to predict the length of time needed for future proceedings, it is clear that several years will be needed to resolve the landfill litigation. In the event that the land exchange is confirmed and all the necessary landfill approvals are issued, construction of the landfill could commence. A timeline for the start of construction is unknown, but is unlikely to occur before 2015 under the most optimistic scenario. Based on the experience of the Mesquite Regional Landfill, construction could take three years before the landfill would be ready to accept waste. Therefore, landfill operations are unlikely to commence prior to 2018.

However, the construction and operation of the Eagle Mountain Landfill may be further delayed due to a lack of demand for additional landfill capacity in southern California at this time. The Mesquite Regional Landfill (MRL) opened for business in 2009. The MRL will provide capacity for approximately 600 million tons of solid waste and 100 years of operation at a maximum of 20,000 tons per day. In 2009, when the MRL became operational, the Los Angeles County Sanitation District's projections show there will be between 10,000 and 16,000 tons per day of excess landfill capacity in Los Angeles County. Although this means there is no immediate need to export trash to the MRL, the Sanitation Districts are proposing to conduct a 300 tons per day operation at the MRL. The projections continue to show excess landfill capacity in Los Angeles County until late 2013, when the Puente Hills Landfill will be closed permanently. According to the projections, there may still be some excess capacity at other landfills in 2013. However, there could be an overall shortfall of 4,500 tons per day in 2013 (Sanitation Districts of Los Angeles County, <http://www.mrlf.org/index.php?pid=101>, accessed February 18, 2009).

If the entire 4,500 tons per day shortfall from Los Angeles County is transported to the MRL facility, there would still be capacity for an additional 15,500 tons per day from other sources at the MRL facility. Therefore, there is enough capacity at the MRL facility to serve southern California's waste disposal needs for decades to come. For these reasons, construction of the landfill is unlikely to commence in the foreseeable future. On this basis, we conclude that the Pumped Storage Project is likely to be built and operational prior to initiation of landfill construction at Eagle Mountain.

Post Construction Operations

During normal operations after construction, the pumped storage project will require a relatively small work force for routine operations and maintenance. Daily traffic patterns would likely be as follows:

- Day and night shift small truck traffic on Kaiser Road into and out of the underground powerhouse access tunnel portal at the lower reservoir.
- Day shift traffic on Kaiser Road into and out of the water treatment facility area.
- Once or twice per day daytime small truck traffic on the lower reservoir perimeter road to inspect the inlet/outlet structure
- Once or twice per day daytime small truck traffic on the access road along the landfill to the upper reservoir and the surge shaft location for inspection of the upper reservoir dams inlet/outlet structure, and the surge control facilities.

During major maintenance activities (once per year and possibly less frequently), larger trucks and construction-type equipment will be traveling on the same project area roads as indicated above. These activities, although relatively infrequent, can be readily coordinated in advance with Kaiser so that landfill operations are not impacted.

As part of the design coordination process between ECE and Kaiser, planning for large and small vehicle traffic and road design should be addressed. Operation of the landfill will be large vehicle and equipment intensive and there will be times when large vehicles and equipment must be mobilized. Roads will be wide enough to accommodate simultaneous road use for both projects. Signage and safety management measures will be designed to address both projects.

January 2011 update: Response to Additional Comments from Kaiser and Others in Review of the July 2010 Draft Environmental Impact Report.

In June 2010, the Draft Environmental Impact Report (DEIR) on the Eagle Mountain Pumped Storage Project was issued by the State Water Board under the California Environmental Quality Act (CEQA) process. In a letter dated October 7, 2010, Kaiser provided additional comments on the Project related to the potentials for conflicts between the Project and the Landfill. ECE's position on these conflicts and proposals to address potential conflicts are summarized below:

Kaiser concern: The proposed construction road to the shaft crosses Phases 2 and 3 of the Landfill.

Response: The existing access road will be used to access the pumped storage surge tank and shaft. However, in the event that the landfill is constructed, a north perimeter access road will be constructed by the landfill for landfill access. The proposed Project will then utilize the north perimeter maintenance road for access to the surge tank and shaft to avoid impacts to the landfill Phases 2 and 3.

Kaiser concern: The Project's upper reservoir outlet channel may conflict with Phase 1 of the Landfill.

Response: The existing natural drainage downstream of the existing Central Pit will accept any flood spills or other releases from the upper reservoir. ECE has assumed that this drainage would not be within the "footprint" of the proposed Landfill. At the present time, with the scale and level of design detail available for both projects, it is not possible to clearly

identify conflicts that may potentially exist. As designs for both projects progress, it will be very important to determine the westerly extent of the Phase 1 Landfill toe and to see whether or not it will extend into the existing drainage, which will be improved to handle the very infrequent outflows from the upper reservoir. If the Landfill toe will extend into this drainage channel, it will be necessary to adjust the channel alignment and to assure that the Landfill toe is protected against erosion.

Kaiser concern: It appears that the upper reservoir dam toe extends into Phase 1 of the Landfill.

Response: The selected upper reservoir south dam axis is tentatively located to minimize the amount of material required to construct the dam, based on available topographic mapping. The dam axis can be adjusted during final project planning and design to avoid any potential for conflict. This adjustment would generally be to the north (upstream) of the currently proposed dam axis a distance of 150 to 200 feet. The “footprint” of the upper reservoir area would not be increased.

Kaiser concern: The transmission line from access tunnel portal to the switchyard is above ground and extends through a portion of Landfill Phase 4.

Response: The current alignment of the transmission line from the access tunnel portal to the switchyard can be modified to avoid Phase 4 of the Landfill, with little impact on the Project. This revised alignment will be developed during final project planning and design, and discussed with Kaiser to be sure of compatibility.

Kaiser concern: Certain proposed Project facilities could interfere with the planned Landfill rail yard and RO/Admin facilities for the Project.

Response: ECE developed Figure 4 using the most-current landfill design drawings which are publically available (dated October 1997). Based on this project layout, ECE understands that the railyard and operations center would be located on the east side of the Landfill. However, other, older drawings from the proposed Specific Plan show the railyard to be located south of the East Pit for the early years of landfill development. The ideal location for the proposed Project switchyard and RO facilities and structures is the one currently shown on the Project drawings. Therefore, it appears that further discussions between ECE and landfill interests will be required as final planning and design of both projects proceeds.

August 2012 update: Response to Additional Comments from Kaiser on Draft Water Quality Certification

Kaiser concern: All five phases of the landfill were covered in the Landfill EIR/EIS and received the necessary approvals from Riverside County.

Response: On January 14, 2000, the Local Solid Waste Management Enforcement Agency for Riverside County issued a Solid Waste Facility Permit 33-AA-0228 for the Eagle Mountain Landfill. The California Integrated Water Management Board concurred with the issuance of Solid Waste Facility Permit No. 33-AA-0228 (Resolution 1999-624 Revised). The Solid Waste Facility Permit issued to the Eagle Mountain Landfill specifies a “permitted area” of 4,654 acres, a “disposal area” of 1,864 acres, and a design capacity for Phases 1 – 4 of 559,963,680 cubic yards. These specifications match the area and capacity of landfill Phases 1 – 4, but do not include landfill Phase 5. Therefore, Landfill Phase 5 is not included in the Solid Waste Facility permit.

The Waste Discharge Requirements (WDR) Order 99-061 issued by the Colorado River Regional Water Quality Control Board states that development of the landfill will, “Begin with Phase 1 and end with Phase 4.” The WDR further states that, “The 1,868 acre landfill will be

constructed in four contiguous phases, containing 13 sequences... The approximate total airspace of the site is 660 million cubic yards, which will provide waste capacity of about 561 million cubic yards during the 84 year life of projected landfill life.” The WDR specifies the construction sequencing of the landfill (starting with Phase 1 and ending with Phase 4) and requires the written approval of the Executive Director for significant deviations in sequencing. Attachment 8 of the WDR is the Landfill Phasing Plan which shows only Phases 1 – 4 of the landfill. No provision is made in the WDR for construction of Phase 5 of the landfill.

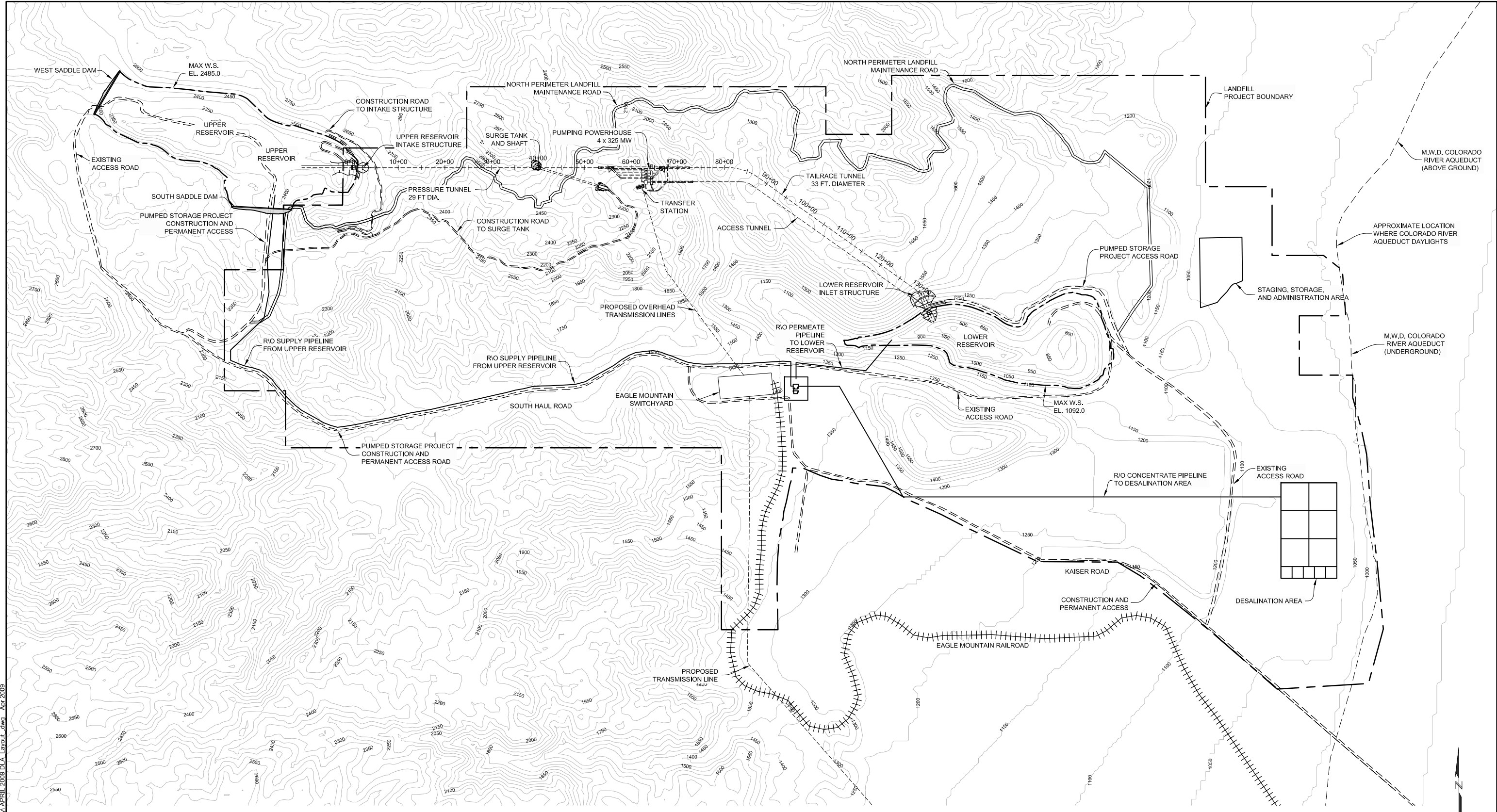
The Report of Disposal Site Information (RDSI) prepared by GeoSyntec in August 1999 and filed with the Regional Water Quality Control Board states that “The proposed landfill operation addressed in this RDSI occurs in four large contiguous phases. A future fill area designated as Phase 5 and evaluated in the EIR/EIS is also indicated in the RDSI for conceptual purposes. The permitting for Phase 5 future fill area will be accomplished at a later date under a separate document from this RDSI... Total estimated capacity of the landfill area (Phases 1 – 4) is approximately 560,700,000 cubic yards which will accommodate the disposal of 462,500,000 cubic yards of waste.” The projected life of Phases 1 - 4 is 84 years. No later permitting was accomplished for Phase 5 of the landfill.

The Development Agreement No. 64 between Riverside County and Mine Reclamation Corporation specifies the term of the agreement, “The County has further approved the term of this Agreement for the period beginning on the Effective Date and continuing until November 30, 2088, and the parties have agreed to stage the term. Specifically, the parties have agreed to initial term of fifty (50) years from the Effective Date, although there will be additional landfill capacity available at the expiration of the initial term of this Agreement...**in no event shall the term of this agreement be extended under this Section 2.3.1 beyond November 30, 2088.**” (emphasis added). As described above, the projected life of Phases 1 - 4 is 84 years. Therefore, even if the landfill were to begin operation this year, which is not possible for the reasons described above, the Development Agreement will expire prior to the completion of Phase 4.

Therefore, we conclude that Phase 5 of the Eagle Mountain Landfill is not a component of the project as approved by Riverside County and the Regional Water Quality Control Board, and there is not sufficient time remaining in the Development Agreement to allow for construction of any phases beyond Phase 4.

Conclusion

Based on GEI’s review of the landfill design, as currently documented, we are of the opinion that both the proposed pumped storage project and the proposed landfill project (Phases 1 – 4) can be constructed and operated without significant conflicts. As final design on both projects progresses, potential conflicts that relate to road use and traffic management will be assessed and planned for.



NOTES:
 1. PLAN BASED ON MAP PREPARED BY C.M. ENGINEERING ASSOCIATES, SAN BERNARDINO, CA.

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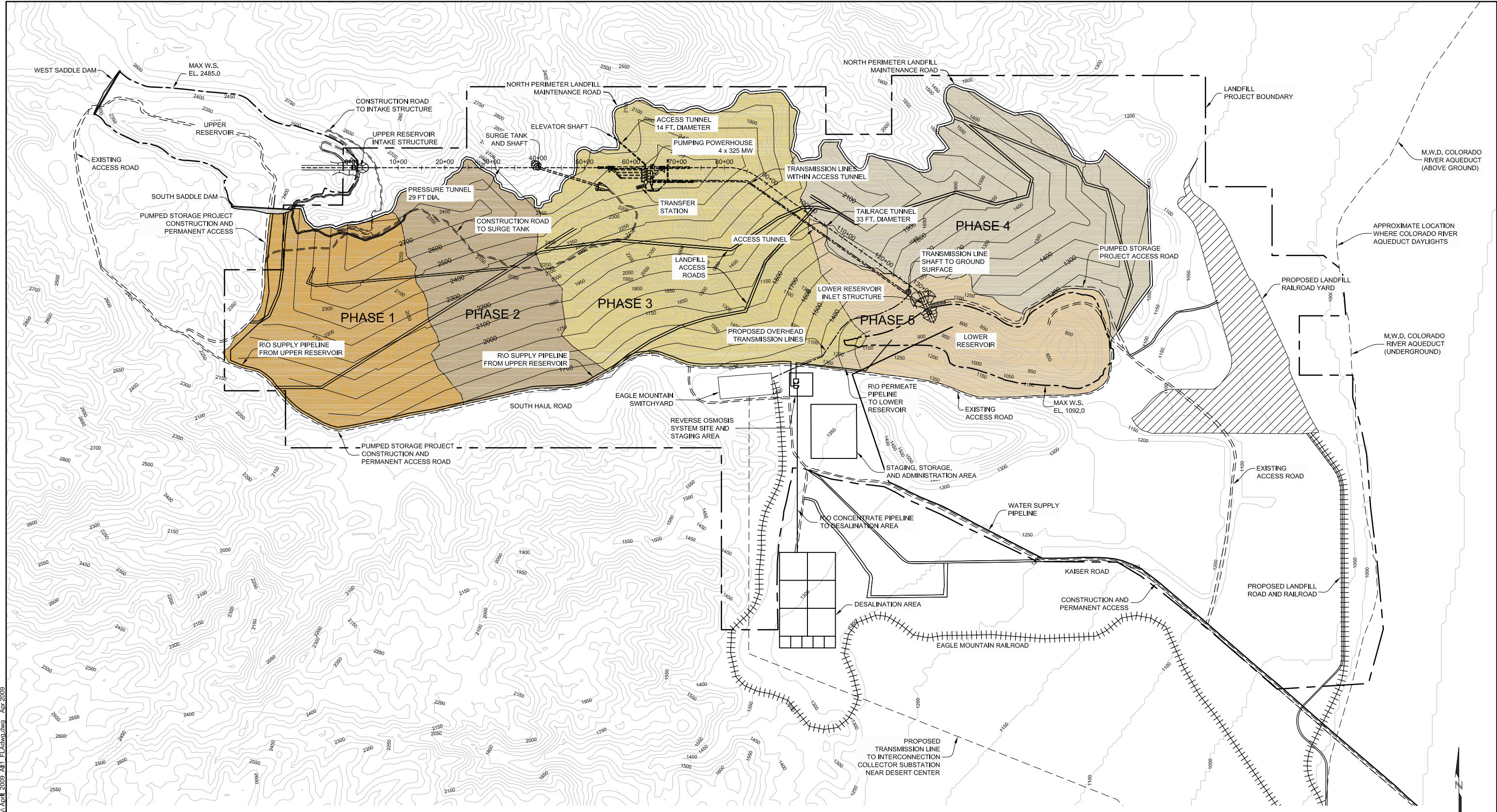


EAGLE CREST ENERGY COMPANY
 GEI PROJECT 080473

EAGLE MOUNTAIN PUMPED STORAGE PROJECT

LANDFILL COMPATIBILITY PLAN DLA LAYOUT

FIGURE NO. **1**
 SHEET NO. **1 of 3**



NOTES:
 1. PLAN BASED ON MAP PREPARED BY
 C.M. ENGINEERING ASSOCIATES,
 SAN BERNARDINO, CA.

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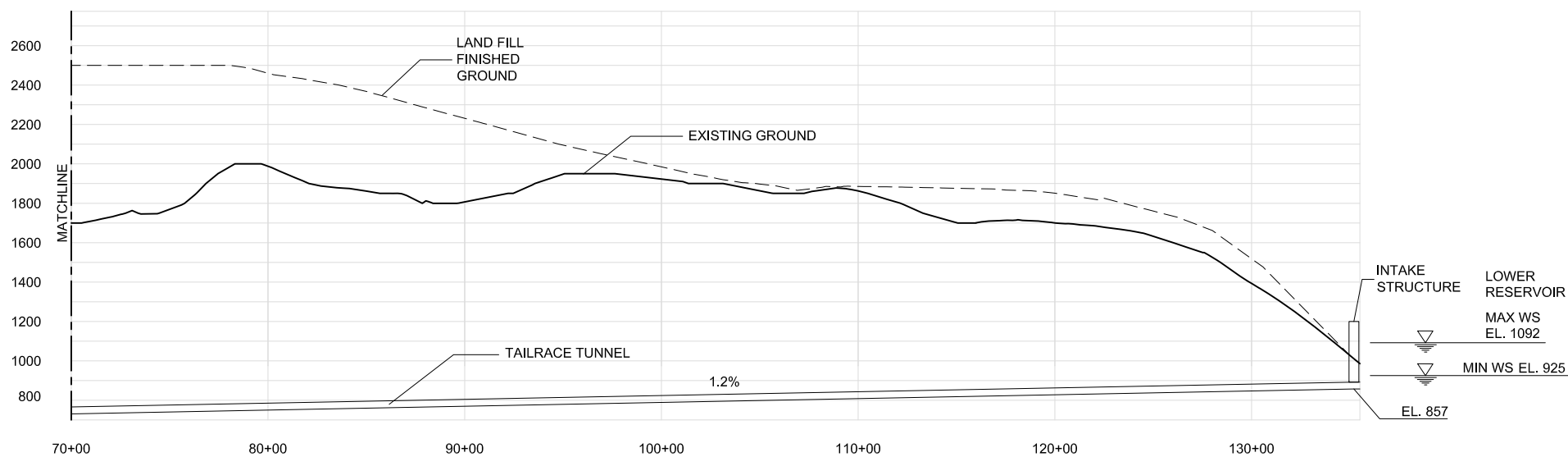
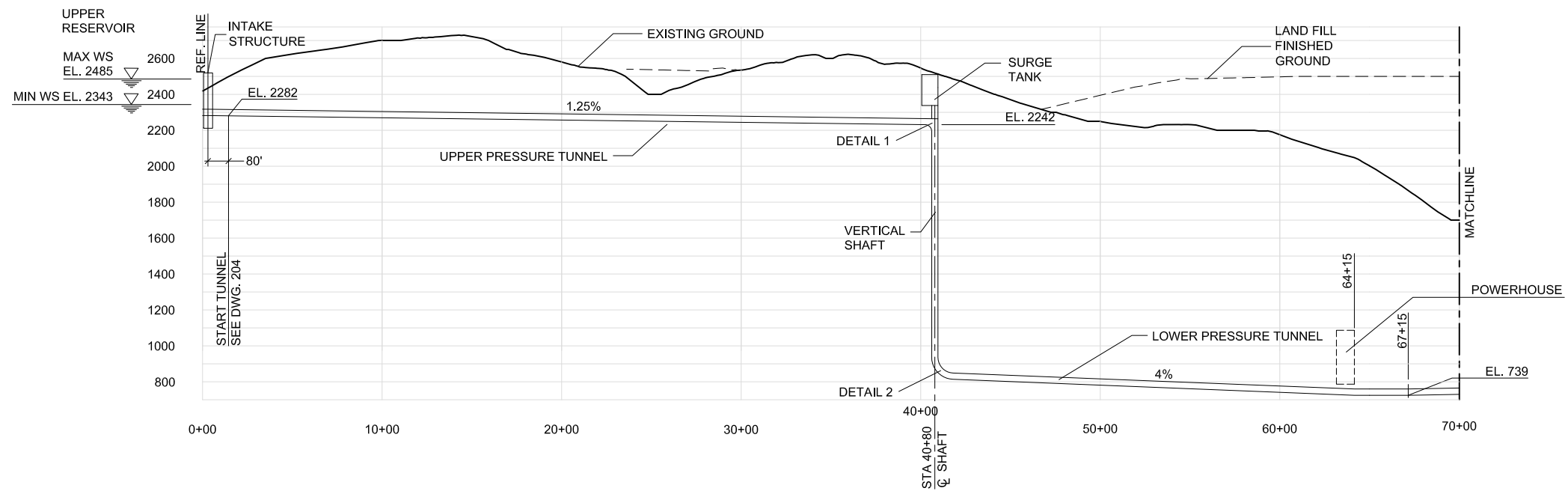


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EAGLE MOUNTAIN PUMPED STORAGE PROJECT

**LANDFILL COMPATIBILITY PLAN
 FLA LAYOUT**

FIGURE NO.
2
 SHEET NO.
 2 of 3



CROSS SECTION ALONG WATER CONDUITS

- NOTES:
1. UNDEFINED LANDFILL CONTOURS WERE ASSUMED TO FOLLOW DEFINED CONTOURS AND TO COME INTO ALIGNMENT WITH THE EXISING GROUND SURFACE.

- NOTES:
1. PLAN BASED ON MAP PREPARED BY C.M. ENGINEERING ASSOCIATES, SAN BERNARDINO, CA.



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EAGLE CREST ENERGY COMPANY

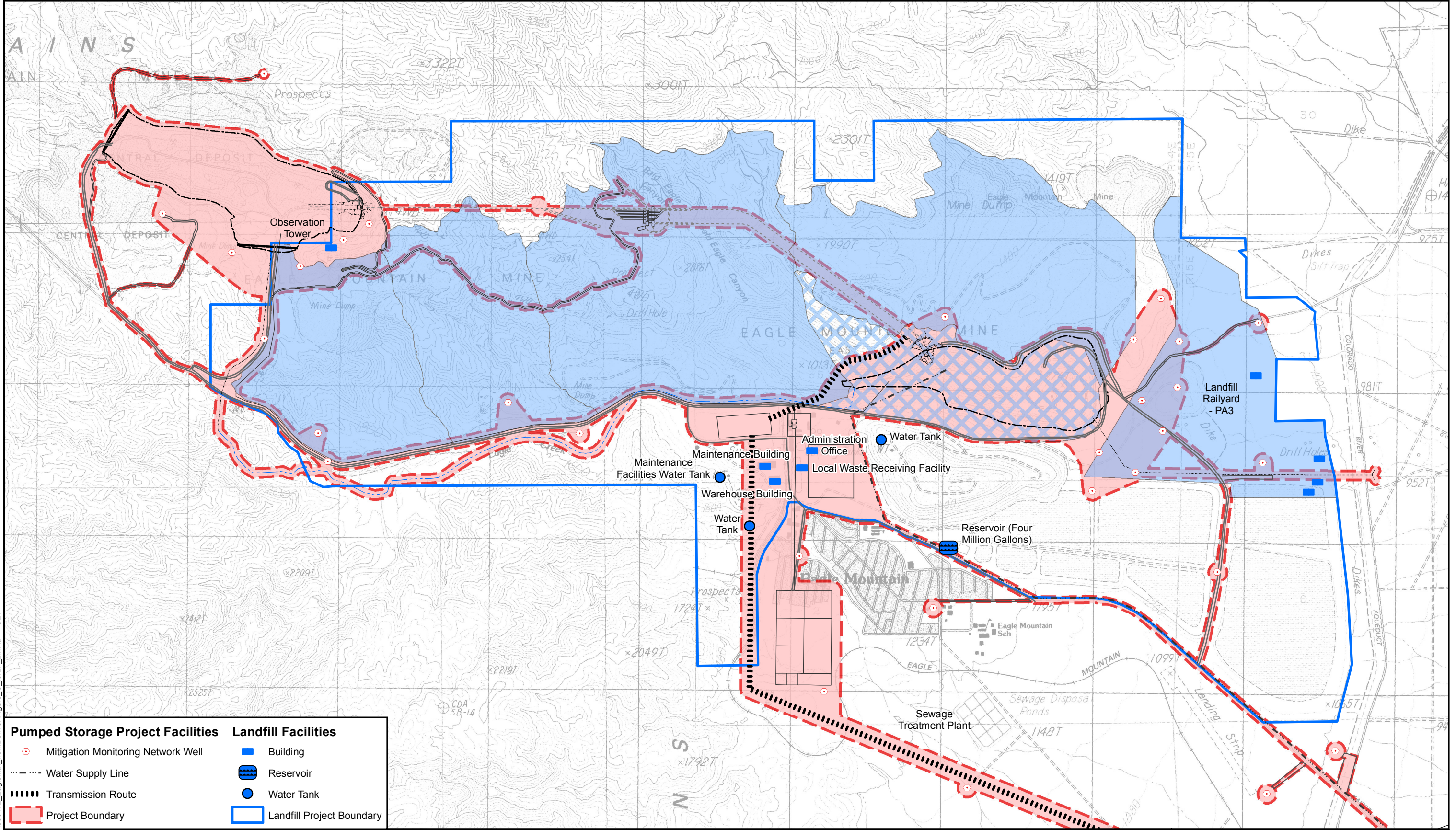
GEI PROJECT 080473

EAGLE MOUNTAIN PUMPED STORAGE PROJECT

LANDFILL COMPATIBILITY FLA LAYOUT - CROSS SECTION

FIGURE NO. **3**
SHEET NO. 3 of 3

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Pumped Storage Project Facilities	Landfill Facilities
Mitigation Monitoring Network Well	Building
Water Supply Line	Reservoir
Transmission Route	Water Tank
Project Boundary	Landfill Project Boundary



Source: Landfill Features from Eagle Mountain Landfill and Recycling Center Site, Report of Disposal Site Information, Site Development Plan, Prepared for Mine Reclamation Corporation by C-M Engineering Associates, Drawing 2 of 43, Feb 1994, updated 10/27/97.

Eagle Crest Energy Company
Eastern Riverside County, California



OVERLAY OF LANDFILL PROJECT (1997 UPDATE) AND PUMPED STORAGE PROJECT (DEIS)
June 2011
Figure 4, Sheet 4 of 4