

SAN ANTONIO WATER SYSTEM
Interdepartment Correspondence Sheet

To: Zoning Commission Members

From: Scott R. Halty, Director, Resource Protection & Compliance Department,
San Antonio Water System

Copies To: Andrew Wiatrek, Manager, Edwards Aquifer and Watershed Protection Division,
Michael Barr, Supervisor, Aquifer Protection and Evaluation Section, Michael A.
Escalante, Environmental Protection Specialist III

Subject: Zoning Case Z2022-10700334 (Bulverde Project)

Date: August 23, 2023

SUMMARY

A request for a change in zoning has been made for an approximate 1.675-acre tract located on the city's north side. A change in zoning from **"R-6 ERZD"** to **"C-2 CD ERZD"** is being requested by the applicant Tim Pheakday, and represented by Evan Jacobson. The change in zoning has been requested to allow for an office warehouse and a retail business development. The property is currently designated as a Category 2.

Based on the site evaluation of the property, and the information submitted by the applicant, SAWS staff recommends **approval** of the proposed land use. Should the City Council rezone the property that is the subject of this report, the San Antonio Water System recommends that any development on that property after the zoning classification has been changed should be restricted as stated in the environmental recommendations section of this report.

LOCATION

The subject property is within City Council District 9, approximately 2.75-miles north of Bulverde Rd. and North Loop 1604 East intersection. The property lies within the Edwards Aquifer Recharge Zone (Figures 1 and 2).

SITE EVALUATION

1. Development Description:

The proposed change is from **"R-6 ERZD"** to **"C-2 CD ERZD"** and will allow for an office warehouse and a retail business development on approximately 1.675-acres. The property is an undeveloped lot with native trees and understory. The proposed project will consist of a metal office warehouse and a retail building with associated parking area.

2. Surrounding Land Uses:

Encino Bluff neighborhood borders to the north of the subject site. Encino Creek neighborhood bounds to the west of the property. Bulverde Road and Ravello neighborhood lies east of the lot. Undeveloped property borders to the south of the site.

3. Water Pollution Abatement Plan:

As of the date of this report, a WPAP has not been submitted to the Texas Commission on Environmental Quality (TCEQ). A WPAP will be required to be submitted to and approved by the TCEQ prior to commencement of construction.

4. Geologic Conditions:

The Aquifer Protection and Evaluation Section of the San Antonio Water System conducted a site evaluation on December 27, 2022, of the referenced property to assess the geologic conditions and evaluate any environmental concerns present at the site. SAWS Environmental Geologist, Mr. Bruce Keels, P.G., was present during the site evaluation.

The subject site was observed to be one lot, currently undeveloped and moderately vegetated with trees and ground level vegetation, approximately 1.675 acres in area. The site is bounded on the north by an earthen drainage channel with single family residential properties beyond, on the west by single family residential property, on the south by undeveloped property, and on the east by Bulverde Road with a residential neighborhood beyond. A preserved cave whose entrance is located on the opposite side of Bulverde Road from the subject site extends under Bulverde Road and approximately 70 feet into the subject site boundary of this zoning case (see Figure 4). It should be noted that the cave is considered to contain endangered species. The property was observed to be undeveloped but with evidence of promiscuously dumped waste material, generally composed of bricks, concrete and roofing shingles, generally located within the northern and eastern portion of the site. A large pile of rocks was observed within the northeastern quadrant of the property. A number of non-karst closed depressions, including apparent tree fall holes and animal burrows, were observed throughout the subject site. These features are not considered to be geologically sensitive.

Moderate to good bedrock exposure was observed throughout the site, including significant float rock exposure. A fault is mapped along the northern edge of the subject site, demarking the boundary between the Leached and Collapsed and Dolomitic Members. Due to disturbance from construction of the earthen drainage channel along the northern property boundary, no visible expression of this fault was observed.

The topography of the property was observed to slope to the north and west. Stormwater occurring on the subject site would discharge to the north and west along the adjacent earthen drainage channel, discharging to an unnamed tributary of East Elm Creek.

Using U.S. Geological Survey Water-Resources Investigations Report 95-4030 it was determined that the majority of the subject site is underlain by the Leached and Collapsed Member of the Person Formation of the Edwards Aquifer, and a very small area of the northern edge of the subject site is underlain by the Dolomitic Member of the Kainer Formation.

The Leached and Collapsed Member of the Person Formation is characterized by the presence of crystalline limestone, grainstone, and mudstone, with chert nodules and breccia conglomerations. This Member is known to have fabric related porosity. The full section thickness of this member is approximately 70 to 90 feet thick. This member produces significant amounts of water and is considered very permeable and a significantly environmentally sensitive section of the Edwards Aquifer. Exposed bedrock and float rock were observed to exhibit characteristics of the Leached and Collapsed Member. The site-specific sensitivity of this geologic member is enhanced by the presence of the adjacent mapped cave that extends into the subject site located within the Leached and Collapsed Member and represents a preferential pathway for fluid transport impacting the Edwards Aquifer.

The Dolomitic Member of the Kainer Formation is characterized by the presence of massively bedded mudstone, grainstone, and recrystallized limestone with abundant chert nodules. The full section thickness of this member is approximately 110 to 130 feet thick. This member produces moderate amounts of water, and includes moderate porosity but intermediate or lower permeability, and has a moderate environmental sensitivity. Due to disturbance from construction of the earthen drainage channel along the northern property boundary, the Dolomitic Member could not be positively identified visually.

Using the Soil Survey of Bexar County, compiled by the United States Department of Agriculture, it was determined that the soil profile of the subject site included the Crawford and Bexar stony soils, (Cb).

The Crawford and Bexar stony soils occur as shallow to moderately deep stony clay with 10 to 40% of limestone or chert fragments. The surface layer is cherty clay loam to gravelly loam up to 22 inches thick. The soil profile within the property was observed to a veneer to a few inches thick, resulting in moderate to good bedrock exposure.

No sensitive geologic features were observed within the subject site from the surface. It should be noted a large buffer area around the cave entrance was preserved as part of the zoning case for the Revallo Subdivision across Bulverde from the current subject site. A similar buffer will be provided for this new zoning case.

ENVIRONMENTAL CONCERNS

The environmental concerns associated with this development being constructed on the Edwards Aquifer Recharge Zone are:

Site Specific Concerns

1. A preserved cave named Black Cat Cave located east of the site, has the potential for contamination of the Edwards Aquifer.

General Concerns

1. The improper use of pesticides, herbicides, or fertilizers needed for landscape maintenance that may be carried off in the first flush of stormwater run-off.
2. The build-up of hydrocarbons and other pollutants on streets, parking lots and other paved areas that are then carried off in the first flush of stormwater run-off.

ENVIRONMENTAL RECOMMENDATIONS

The following recommendations address the environmental concerns raised by the construction of this development on the Edwards Aquifer Recharge Zone:

Site Specific Recommendations

1. The impervious cover shall not exceed 64.20% on the 1.675-acre site.
2. A natural buffer shall be provided for the preserved Black Cat Cave located on-site as required in Ordinance No. 81491, Section 34-920. The location of the natural buffer is further shown in the submitted conceptual site plan, attached as Figure 3 and Figure 4. The intent of this exhibit is to show the location and buffering of the sensitive geologic feature, however, the remainder of the site is subject to change. No building permit will be issued until final plans are approved with the appropriate buffer preserved.
3. No outside storage of chemicals/merchandise shall be allowed.
4. No manufacturing, maintenance, nor repairs of equipment shall be allowed on site.
5. The land uses within the project site shall be in conformance with the table of permitted uses at the time the re-zoning is approved. Should a proposed use be listed as requiring City Council approval, the owner/operator shall apply for re-zoning for that particular use at the project site. If the land use is listed as special use, a special permit must be obtained for that use. If the land use is listed as not allowed, that land use will not be permitted on the project site.

6. The owner of all water pollution abatement structures shall ensure these structures are properly maintained and kept free of trash and debris. A signed water quality maintenance plan must be submitted to the Aquifer Protection & Evaluation Section of SAWS. If at any time the ownership of the property changes, the seller must disclose to the buyer all the requirements of the water quality maintenance plan. The new owner must submit a signed water quality maintenance plan to the Aquifer Protection & Evaluation Section of SAWS.
7. Landscaped areas shall be sensitive to minimizing water needs, i.e., use of native plants. Each purchaser of an individual lot or tenant within this development shall be informed by the seller or lessor in writing about Best Management Practices (BMP) for pesticide and fertilizer application. Preventing Groundwater Pollution, A Practical Guide to Pest Control, available from the Edwards Aquifer Authority (210) 222-2204, or equivalent information produced by the U.S. Natural Resource Conservation Service, Texas Department of Agriculture, U.S. Department of Agriculture, shall be used.
8. The applicant shall notify the Construction Monitoring of SAWS at (210) 233-3565 no later than 48 hours prior to the commencement of construction at the site. If any significant geologic features such as, but not limited to, solution openings, caves, sinkholes, or wells are found during the excavation, construction, or blasting, the developer shall notify the Texas Commission on Environmental Quality and the Aquifer Protection & Evaluation Section of SAWS at (210) 233-3522.

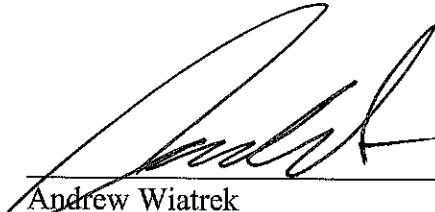
General Recommendations

1. Prior to the release of any building permits the owner/operator of any Category 2 property shall submit an Aquifer Protection Plan to the Aquifer Protection & Evaluation Section of the San Antonio Water System.
2. The City of San Antonio shall inspect all future construction of the sewage collection system to include service laterals and sewer mains for proper construction according to State and City Regulations and Code.
3. Prior to the release of any building permits, the following shall be submitted to the SAWS Aquifer Protection & Evaluation Section of the Resource Protection Division:
 - A. A copy of the Water Pollution Abatement Plan shall be submitted for the development within the area being considered for re-zoning,
 - B. A set of site-specific plans which must have a signed Engineers Seal from the State of Texas,

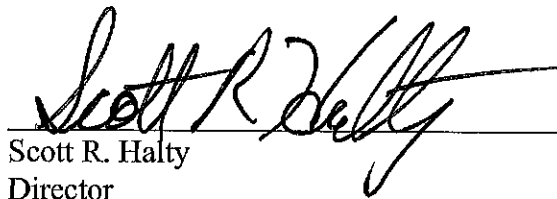
- C. A WPAP approval letter from the Texas Commission on Environmental Quality,
 - D. A copy of the approved Water Pollution Abatement Plan.
4. The Resource Protection & Compliance Division staff shall have the authority to inspect the site to ensure that the approved recommendations are being strictly adhered to during and after construction of the project.

Based on the site evaluation of the property, and the information submitted by the applicant, staff recommends **approval** of the proposed land use. Additionally, SAWS staff recommends that the applicant, or any future owner, comply with the above recommendations in regards to the development of the subject property.

APPROVED:

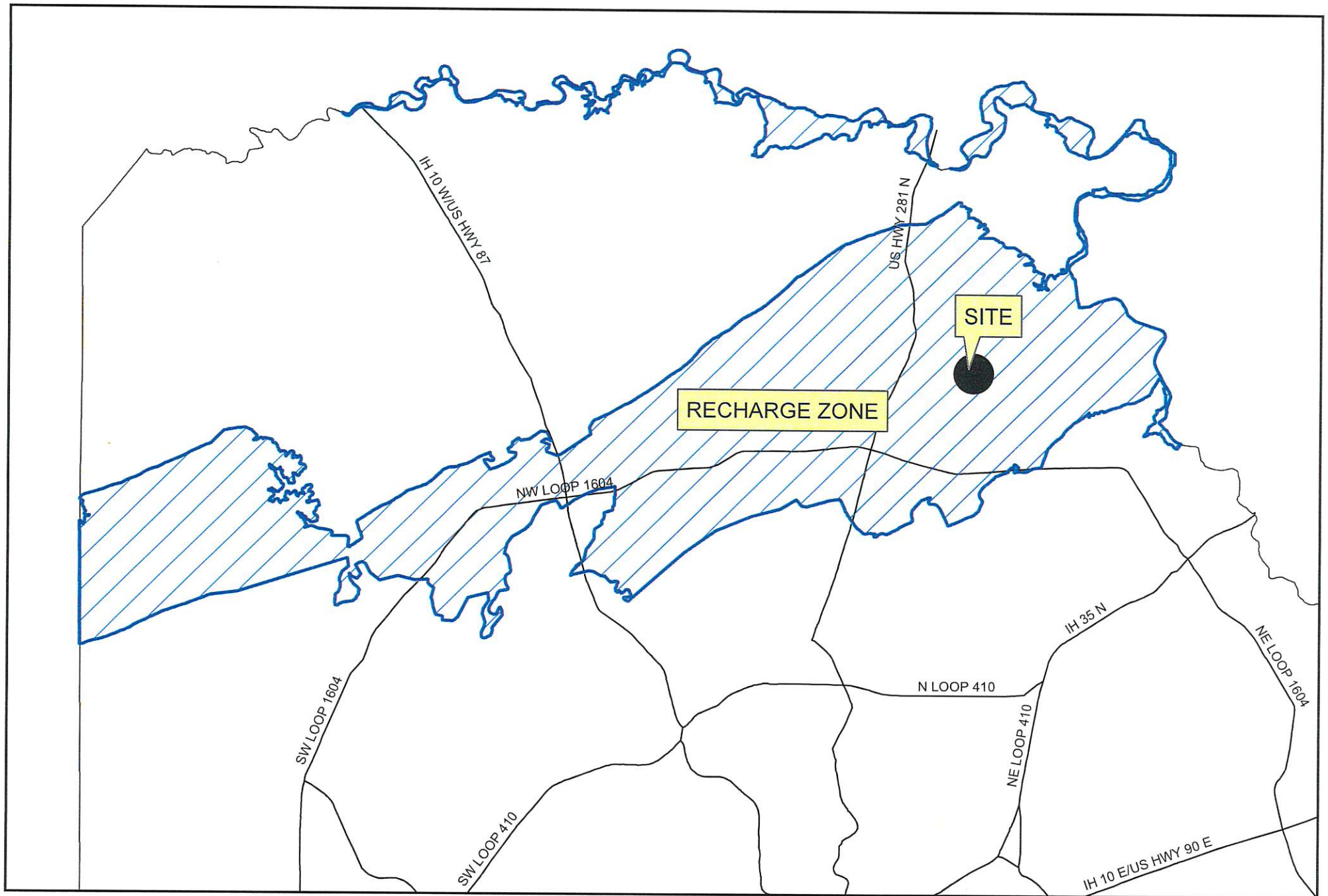


Andrew Wiatrek
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Edwards Aquifer and Watershed Protection Division



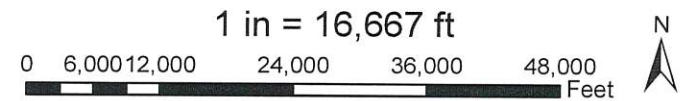
Scott R. Halty
Director
Resource Protection & Compliance Department

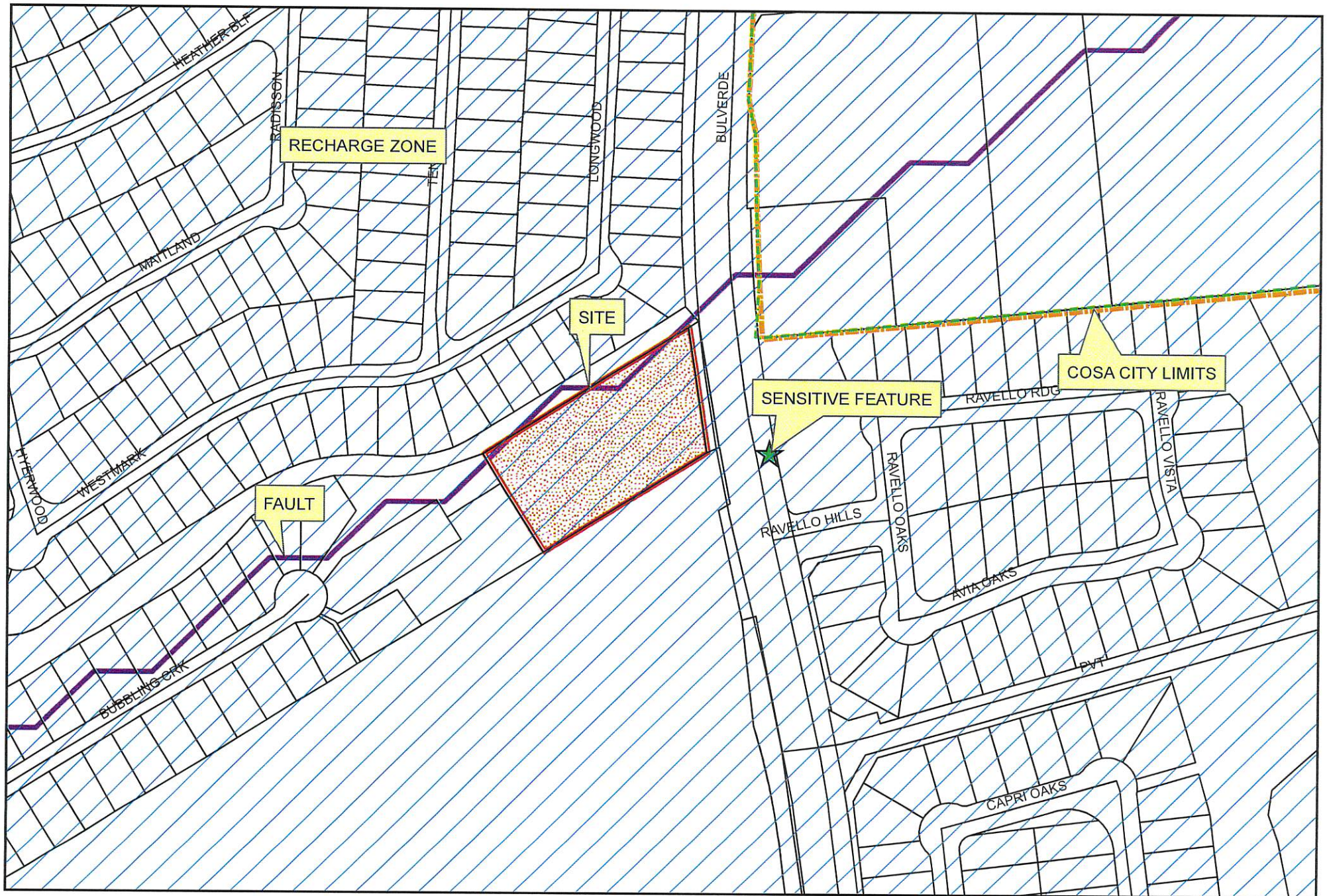
MJB:MAE



ZONING CASE: BULVERDE PROJECT (FIGURE 1)
ZONING FILE: Z2022-10700334

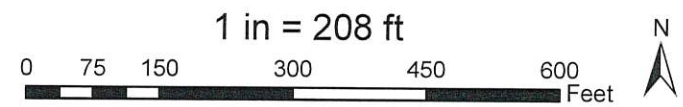
Map Prepared by SAWS, Resource Protection & Compliance Dept. MAE 12/19/2022

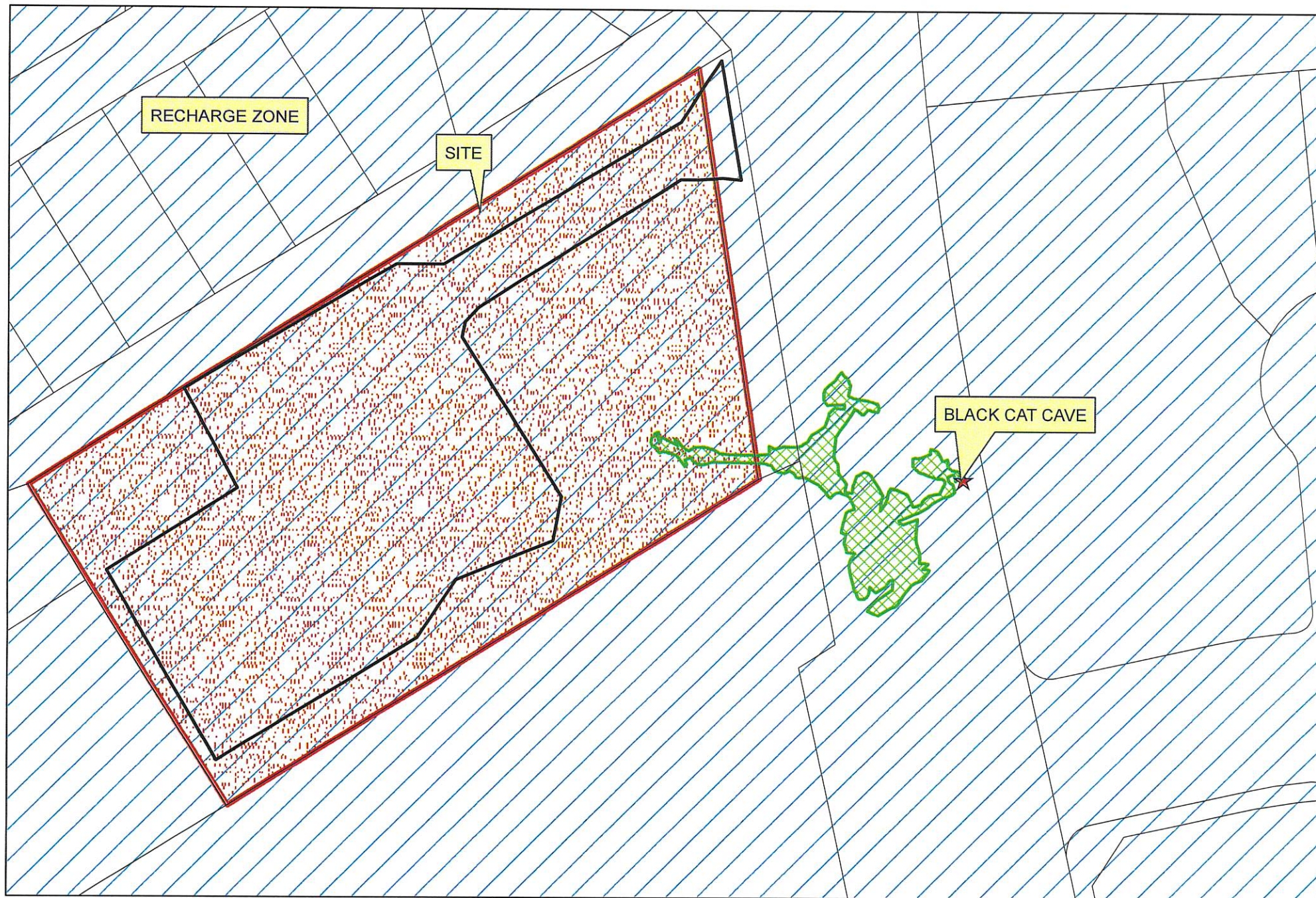




ZONING CASE: BULVERDE PROJECT (FIGURE 2)
ZONING FILE: Z2022-10700334

Map Prepared by SAWS, Resource Protection & Compliance Dept. MAE 5/23/2023





ZONING CASE: BULVERDE PROJECT (FIGURE 4)
ZONING FILE: Z2022-10700334

Map Prepared by SAWS, Resource Protection & Compliance Dept. ME 8-10-2023

1 inch = 64 feet

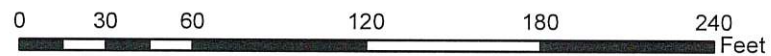
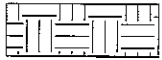


Figure 3

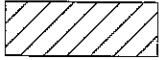
POTENTIAL BUFFER AREA = 6,250 S.F.



IMPERVIOUS AREA



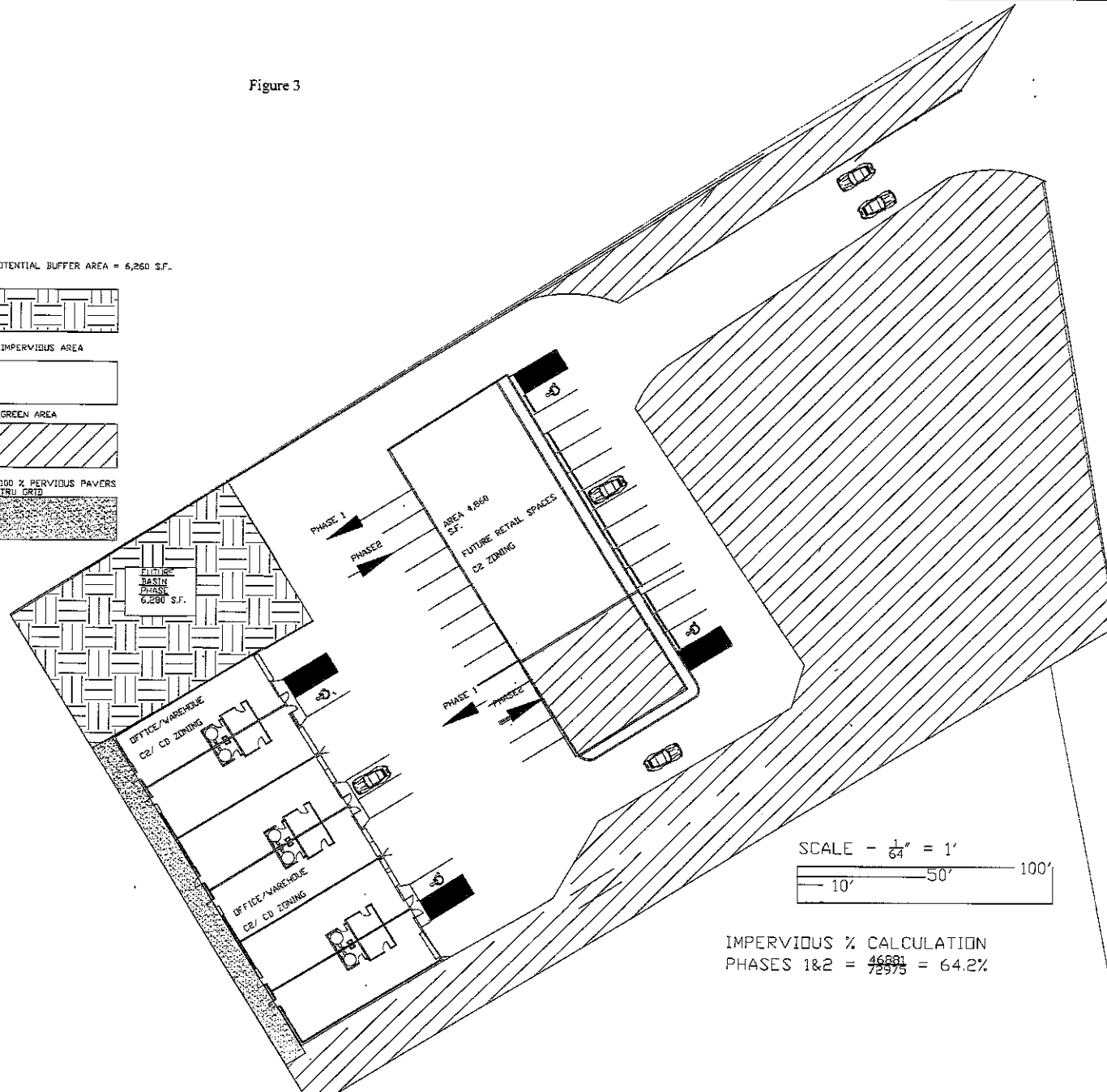
GREEN AREA



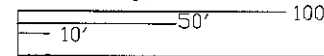
100% PERVIOUS PAVERS
TRU GRID



FUTURE
BASIN
PHASE
6,250 S.F.



SCALE - $\frac{1}{64}'' = 1'$



IMPERVIOUS % CALCULATION
PHASES 1&2 = $\frac{4688}{7297} = 64.2\%$