

PROJECT OVERVIEW

HM²D will develop the land for the Bobcat Ridge Project following sustainable guidelines.

The site is located in San Antonio, Tx. and resides on 35 acres of flat land.

It is zoned as I-1 (General Industrial District).



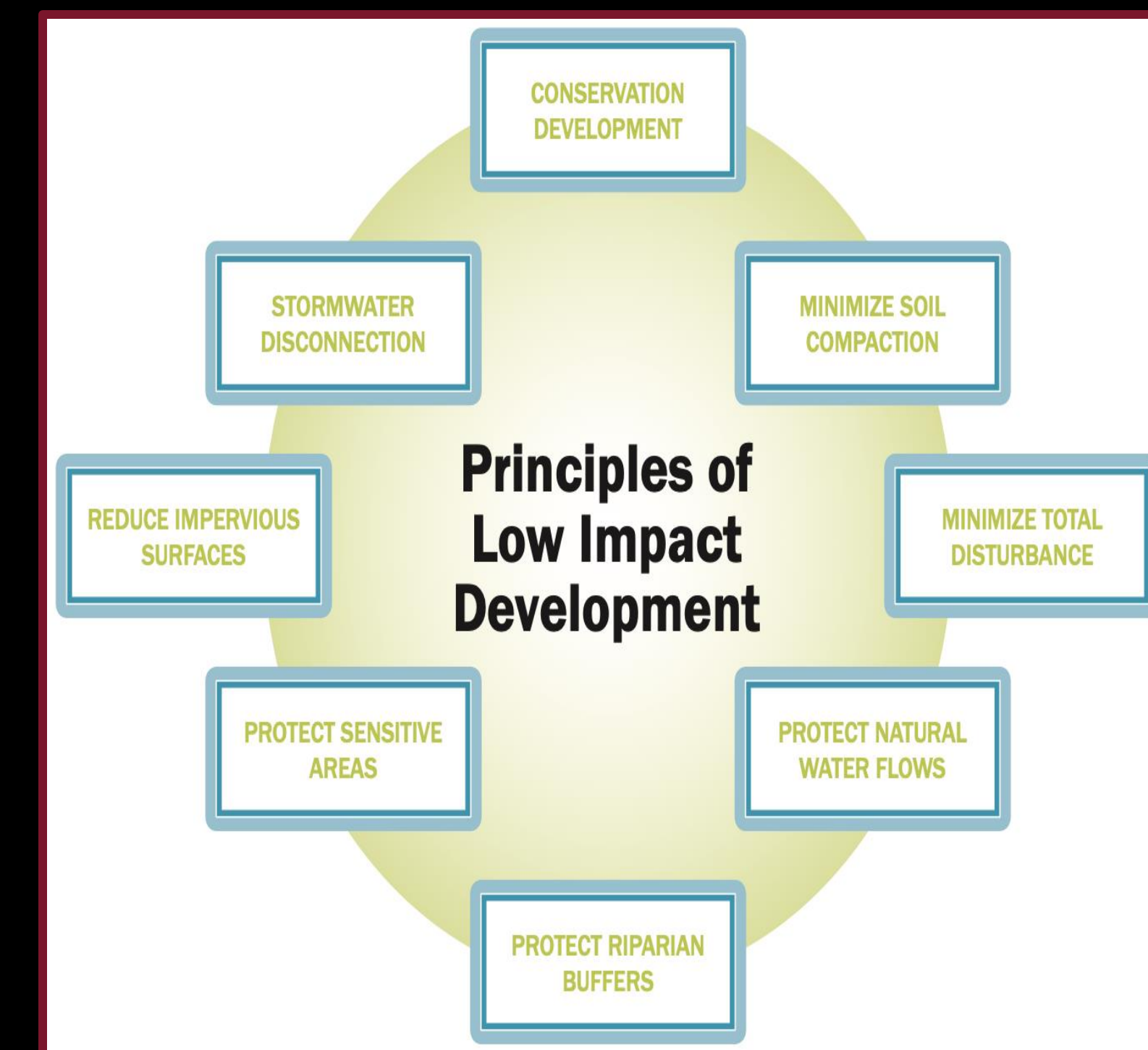
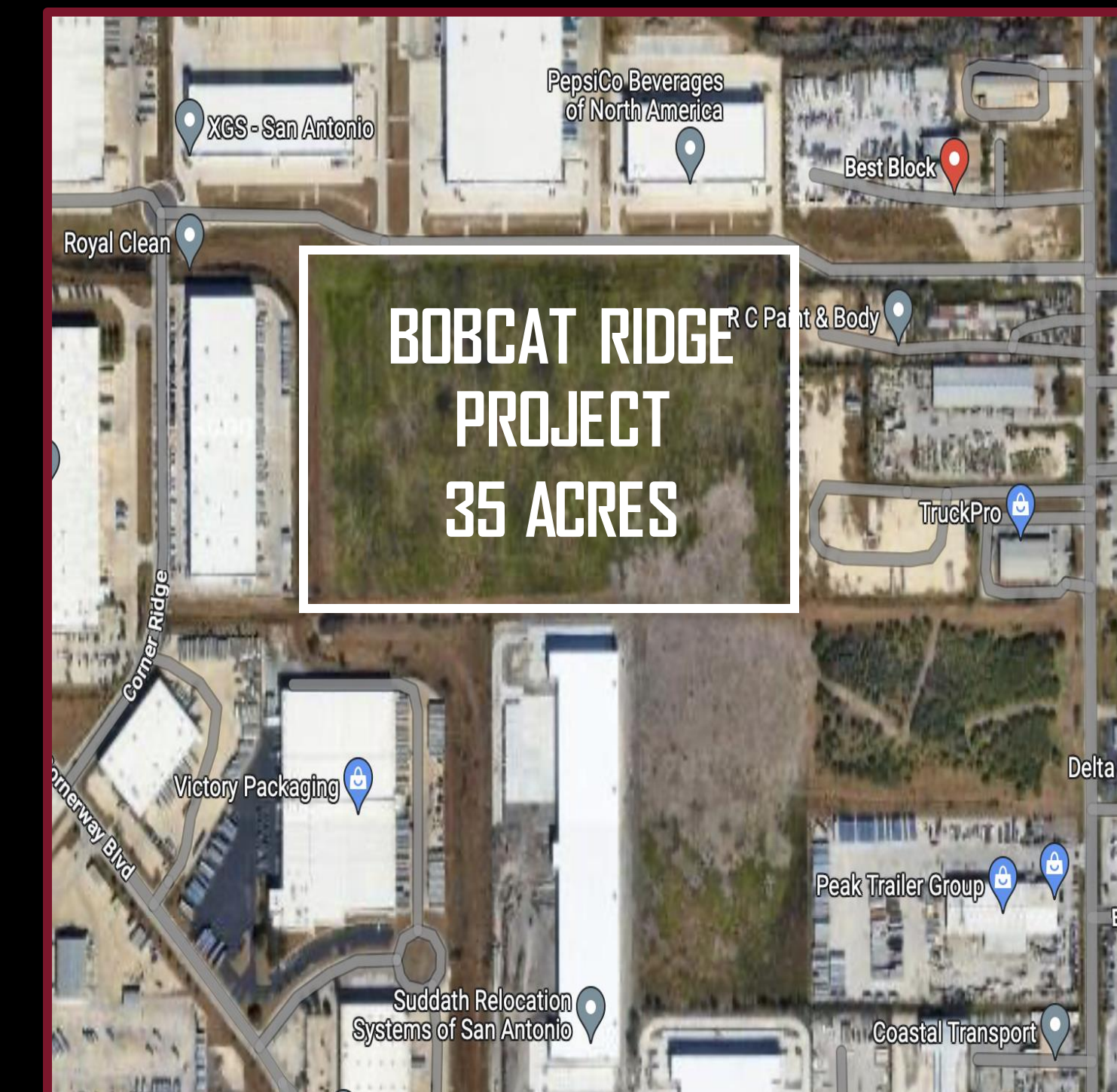
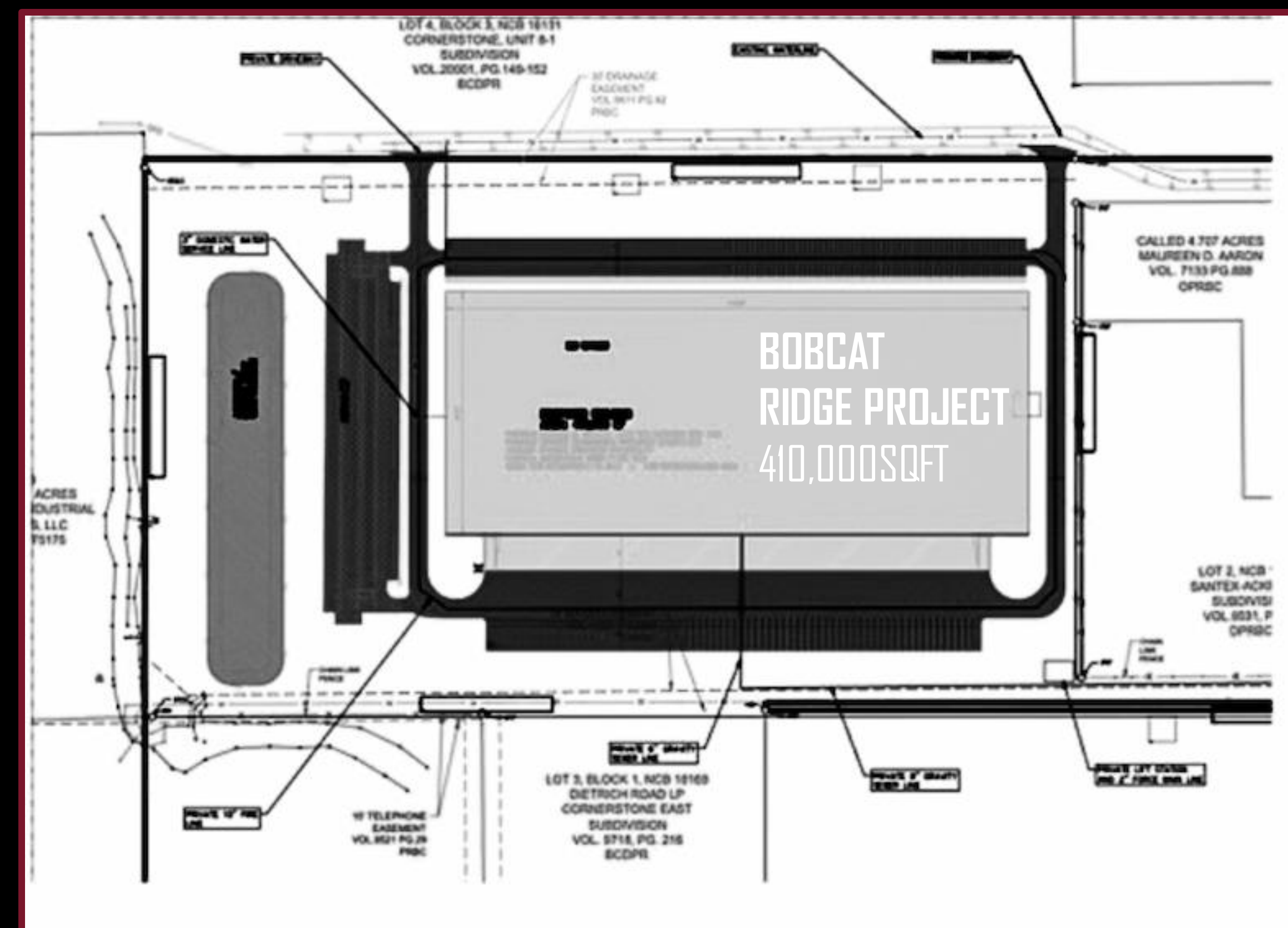
SUSTAINABILITY FRAMEWORK

Low Impact Development (LID) refers to systems and practices that use or mimic natural processes. This includes infiltration, evapotranspiration, or use of stormwater to protect water quality and associated aquatic habitat.

- Bioswales
- Pervious concrete
- Soil compaction



(Fig. 1 - Concept Plan of Bobcat Ridge Project, Blackbird Studio Architects)



ALTERNATIVE EVALUATION

3 designs were envisioned. Based on criteria, HM²D decided on the industrial warehouse.

Alternative	Zone Type	Estimated Square Footage	Acres
Multi-Family Complex	MF-33	93000	2.13
Commercial Office Space	C-2	120,000	2.75
Industrial Warehouse	I-1	410,000	9.41

CAPITAL & LIFE-CYCLE COSTS

(*Estimated Initial Costs for Bobcat Ridge Project | 410,000sq.ft.)

City of San Antonio Development Services Fee	\$11,000
Project Manager	\$40,000
Land Acquisition	\$2 million (in 2019)
Warehouse (Materials etc.)	\$26 million
Equipment costs	\$200,000 (6-month time frame)
Land clearing (excavation etc.)	\$28,000
General liability insurance costs (\$0.40 up to 25/sq.ft.)	\$820,000 (yearly premium)
Labor costs	\$2.9 million

(Table 1 – Initial Development Services Fees)
Total Initial Costs = \$32,000,000

Life-Cycle Costs Calculator		Units
Blocks shown as light blue are editable		
Initial cost premium of alternative IC =	31999000	\$
yearly energy cost saving COST _{energy} =	1673378	\$
yearly maintenance cost reduction COSR _{maint} =	40800	\$
Lifetime (years) See Table 1.0 =	75	years
Discount Rate =	4.0	%
equal series present worth factor See Table 1.0 ESPWF =	23.6800	-
equal series present worth factor Calculated ESPWF =	1.0569	-
Calculated Results		
Life Cycle cost (calc'd with table 1.0 data) LCC =	72590735	\$
Life Cycle cost calculated LCC =	33810746	\$

SECOND SEMESTER PLAN

- Paving Plan
- Utility Plan
- Grading Plan
- Lift Station
- Traffic Impact Analysis

Resources

