

Project Overview

Site location: 600 Center Point Road, San Marcos, Texas

Goal: Develop a fully functional industrial site that meets all regulatory requirements

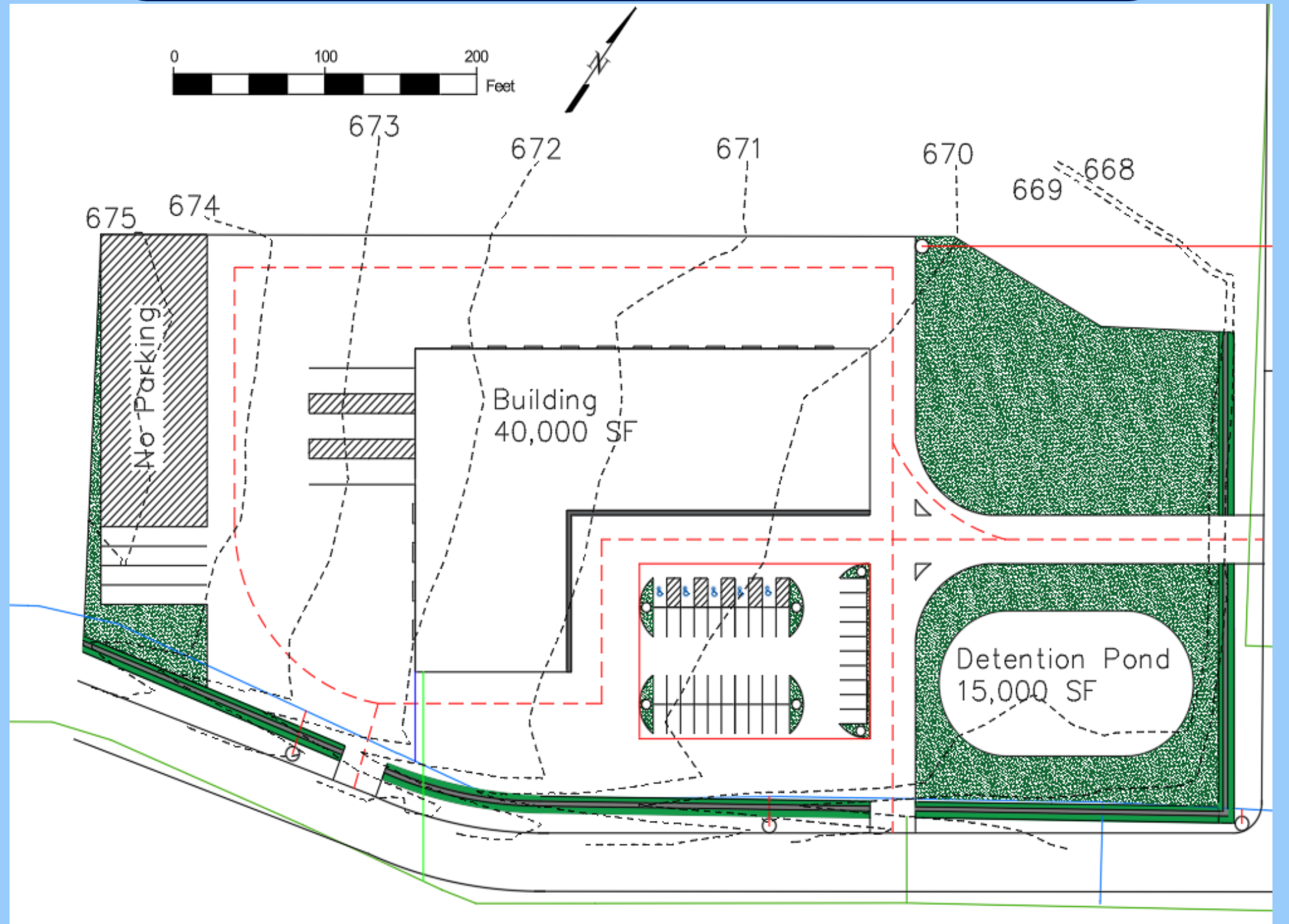
Scope: Construction of a 40,000 SF industrial facility.

Sustainability: LEED Gold Certified

Constraints and Standards

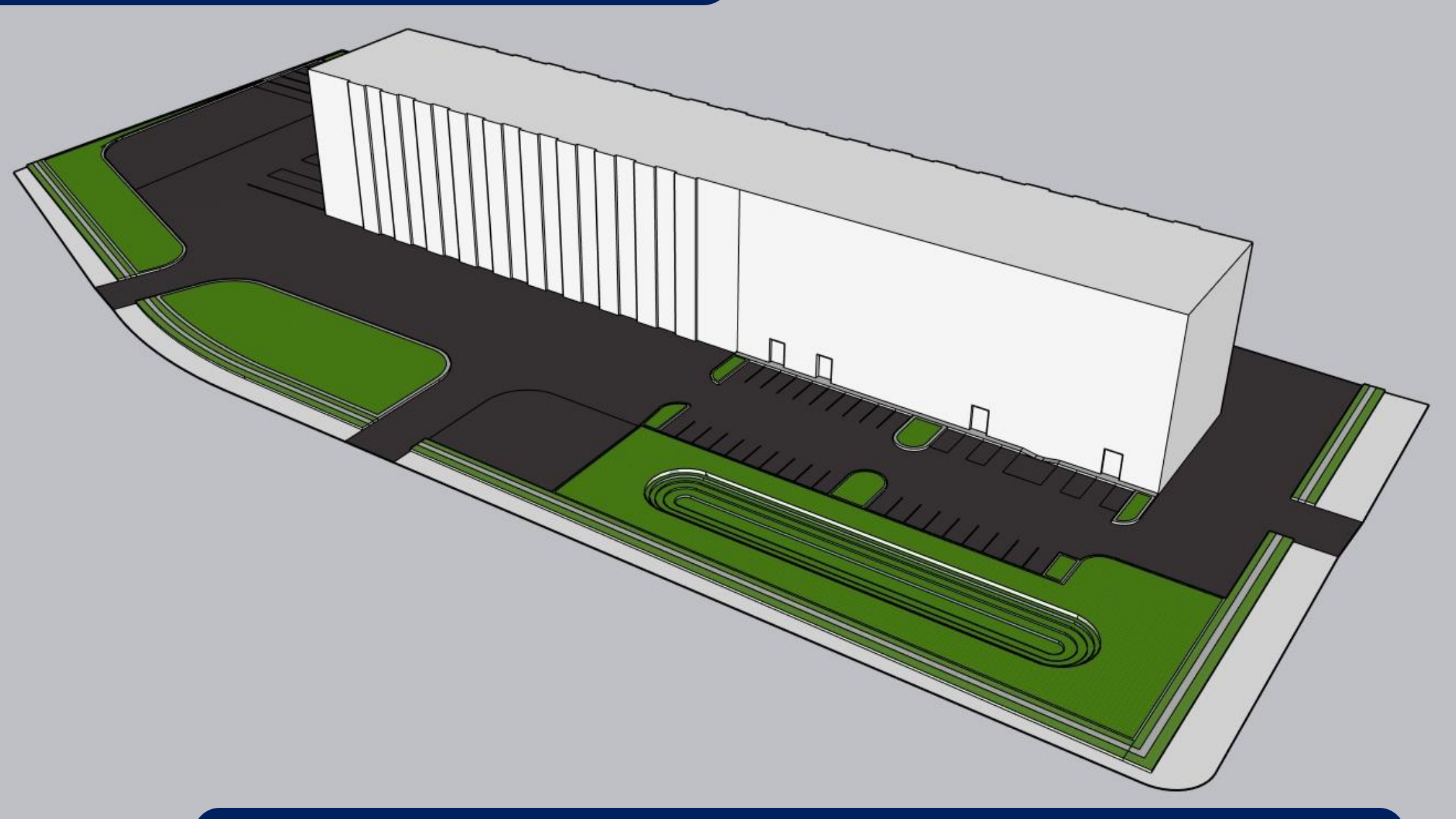
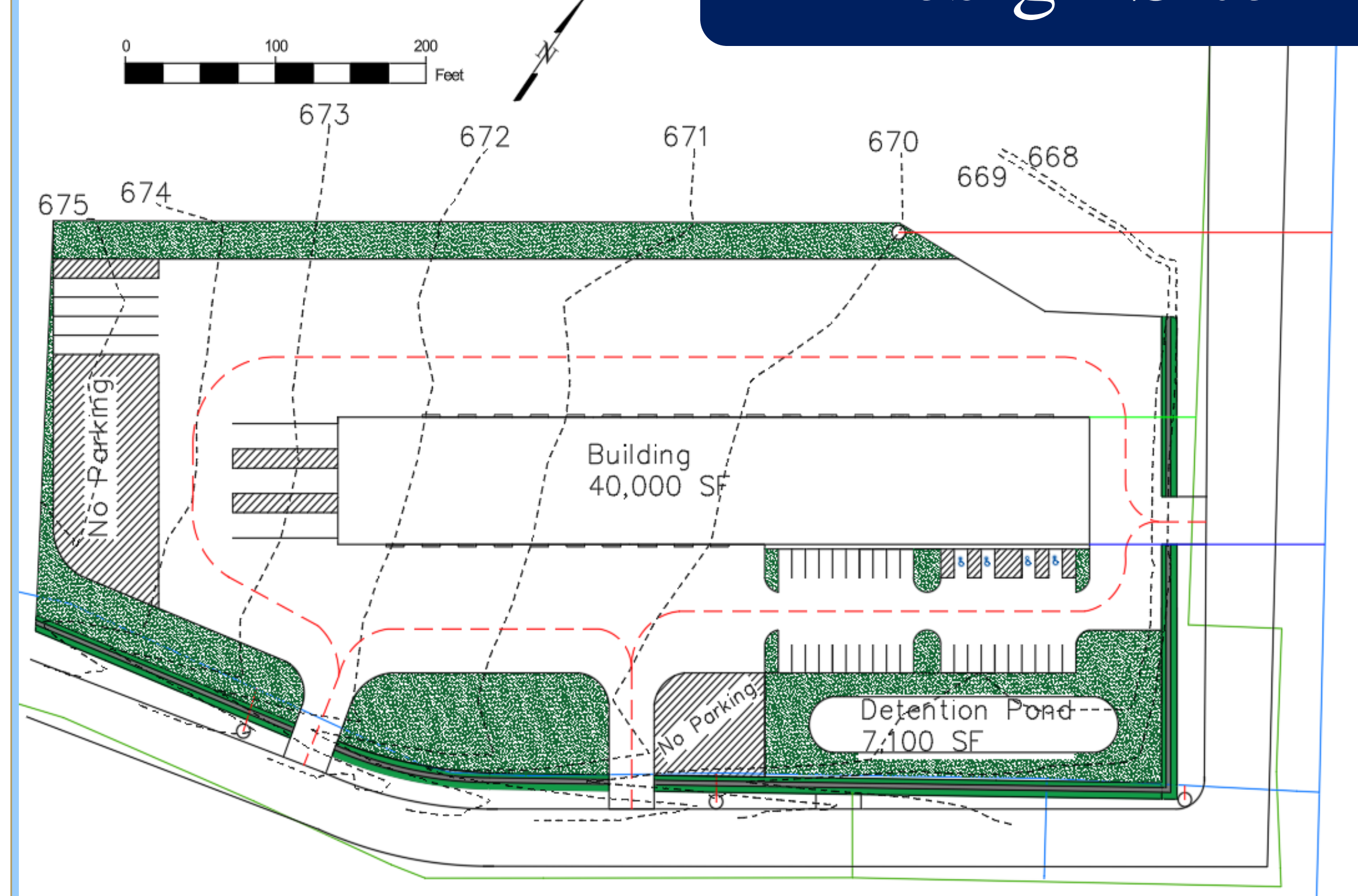
- Topography
- Protected areas
- Code and regulation
- Road access
- Utility
- Fire safety
- Flood and storm drain
- Budgeting
- Zoning regulations

Alternative Site Plan: L-Design



R-Design Proposed Site Development

R-Design Site Plan & 3D Render



Capital Cost

R-Design	Cost \$
Pavement (Asphalt)	\$1,340,000
Green Space	\$80,000
Street	\$22,000
Pond/Drainage	\$320,000
Water Lateral (S900 HDPE)	\$15,000
Sewer Lateral (HDP)	\$8,500
Stormwater Runoff	\$545,000
Permits and Fees	\$190,000
Fire Protection	\$180,000
Electric	\$590,000
Opinion of Probable Cost (OPC)	\$3,300,000
Allowance (10%)	\$330,000
Contingency (15%)	\$500,000
Total	\$4,100,000

Overview

- 30 Standard Parking, 4 Accessible Parking, and 4 Truck Parking
- 7,000 SF Detention Pond
- 161,000 SF Asphalt Pavement
- 52,000 SF Green Space
- 156 LF Water Lateral
- 70 LF Sewer Lateral
- 2,675 SF Sidewalk

Life Cycle Cost

Year	Capital Cost	Operational Cost	Maintenance Cost	Salvage Value
0	\$4,100,000	\$0	\$0	\$0
1 to 10	\$0	\$110,000	\$320,000	\$0
11 to 20	\$0	\$110,000	\$320,000	\$0
21 to 30	\$0	\$110,000	\$320,000	\$0
31 to 40	\$0	\$110,000	\$700,000	\$1,220,000
Total	\$4,100,000	\$440,000	\$1,700,000	\$1,220,000

	NPV of cash inflow from year 1-40 (Discount Rate: 5%)	Capital Cost	Total NPV
R-Design	\$9,000,000	\$4,100,000	\$4,900,000

Team Members



Name according to standing position:
Natalie George, Ruth Jarrett, Luis Garza, David Hakim

Sustainability Overview

LEED Checklist	Total credits available	Total Credits Obtained
Location and Transportation	16	7
Sustainable Sites	10	6
Water Efficiency	11	9
Energy and Atmosphere	33	23
Materials and Resources	13	13
Indoor Environmental Quality	16	7
Innovation	6	4
Regional Priority	4	4
Total	109	73

Second Semester Plan

- The second phase will involve:
- Stormwater Management Design
 - Sanitary Sewer System Design
 - Water Supply and Fire Protection