DAVENPORT RANCH FIRE/EMS STATION JAL

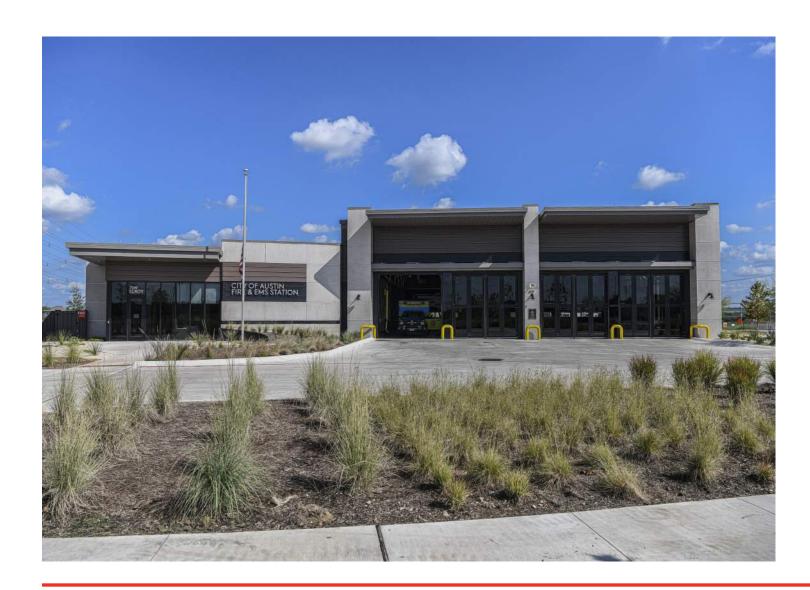


DESIGN COMMISSION | SEPTEMBER 27, 2021

PREVIOUS COA FIRE/EMS STATIONS

DEL VALLE FIRE/EMS STATION

- 12,700 square feet
- Single story structure
- -4 pull-through apparatus bays
- -Completed July 2020



TRAVIS COUNTRY FIRE/EMS STATION

- 15,000 square feet
- 2 story structure due to site size
- 4 back-in apparatus bays
- -Completed July 2021





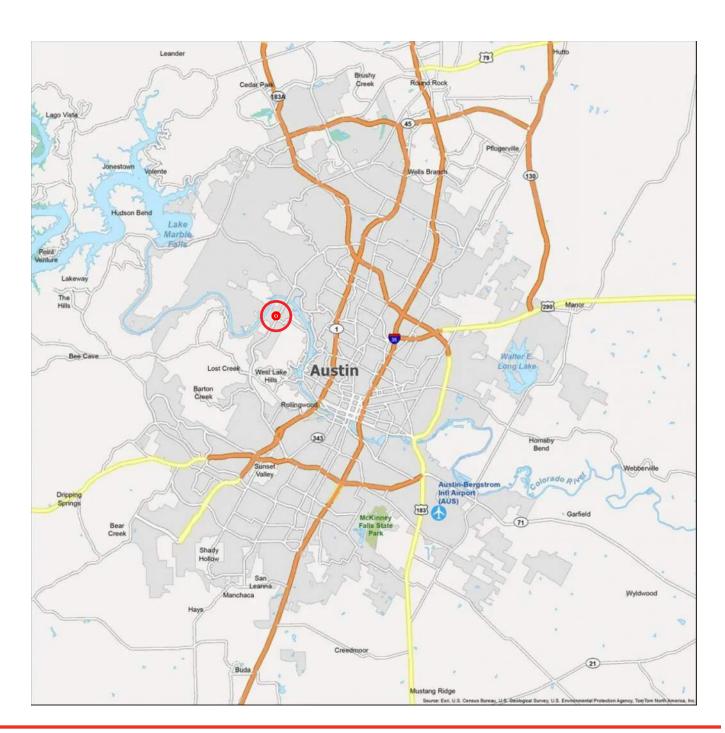
DAVENPORT RANCH FIRE/EMS STATION

GOAL:

PROVIDE EMERGENCY RESPONSE SERVICES TO DAVENPORT RANCH AREA

PROJECT ELEMENTS:

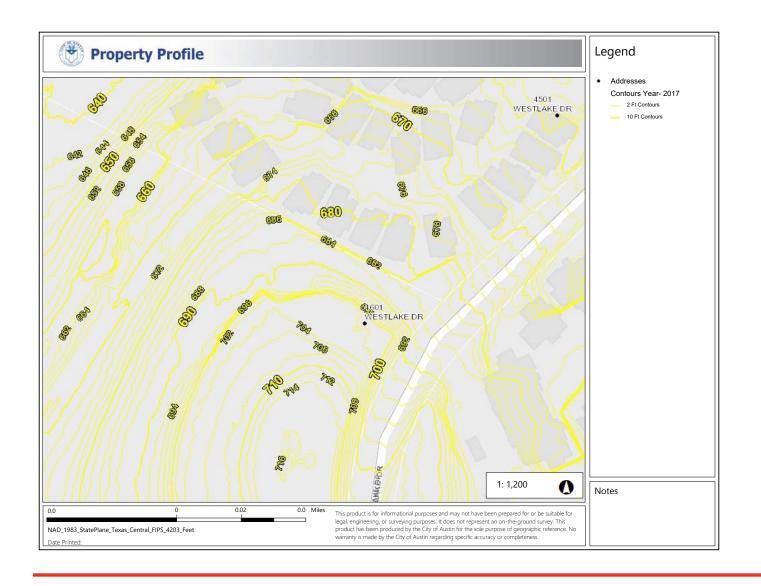
- 13,500 square feet; 4 apparatus bays
- 24 staff parking
- 2 visitor parking
- Compact design due to site limitation
- Water treatment pond
- Site retaining wall
- Staff exterior space (accessible from Day Room)
- Day Room, Kitchen, Gym, gear storage rooms, 14 sleep rooms

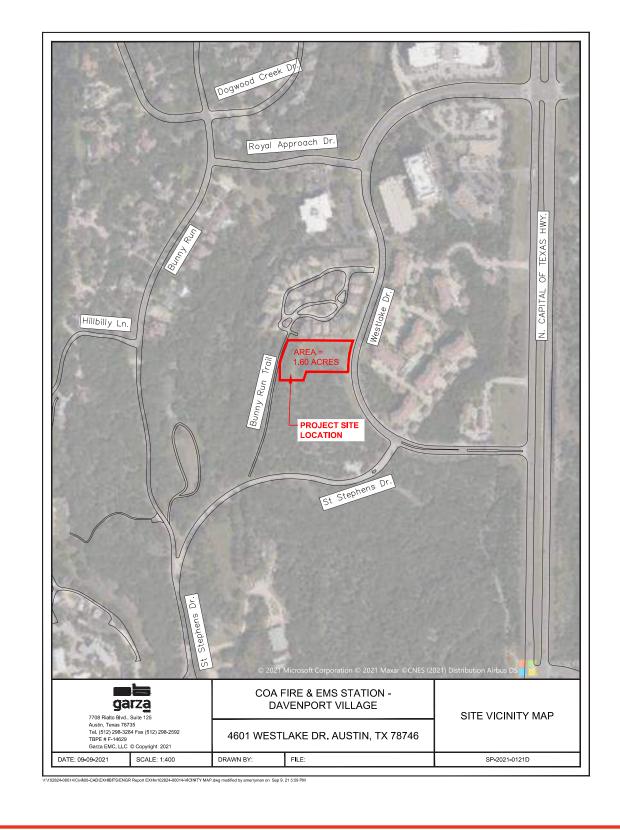


DAVENPORT RANCH FIRE/EMS STATION

SITE & CONTEXT:

- -On St. Stephen's property
- -No public transport within 1/4 mile
- -Located in the ETJ
- -Site has steep, rocky terrain



























SITE PHOTOS: WESTLAKE DRIVE















ARCHITECTURAL CONTEXT

ST. STEPHEN'S EXISTING ARCHITECTURE:

- -Natural Stone
- -Metal low-slope roofing
- -Large architectural overhangs
- -Large glazing units





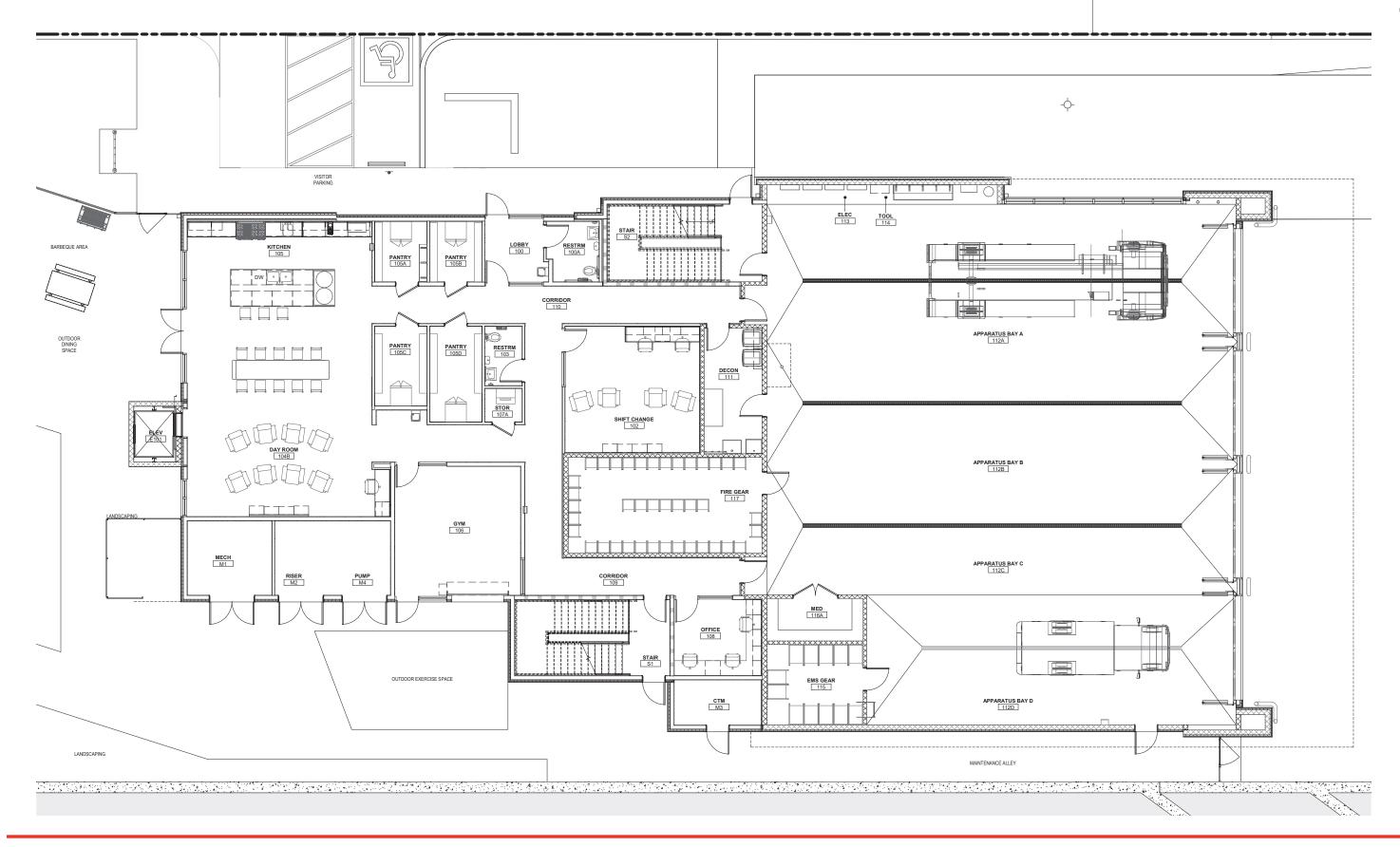






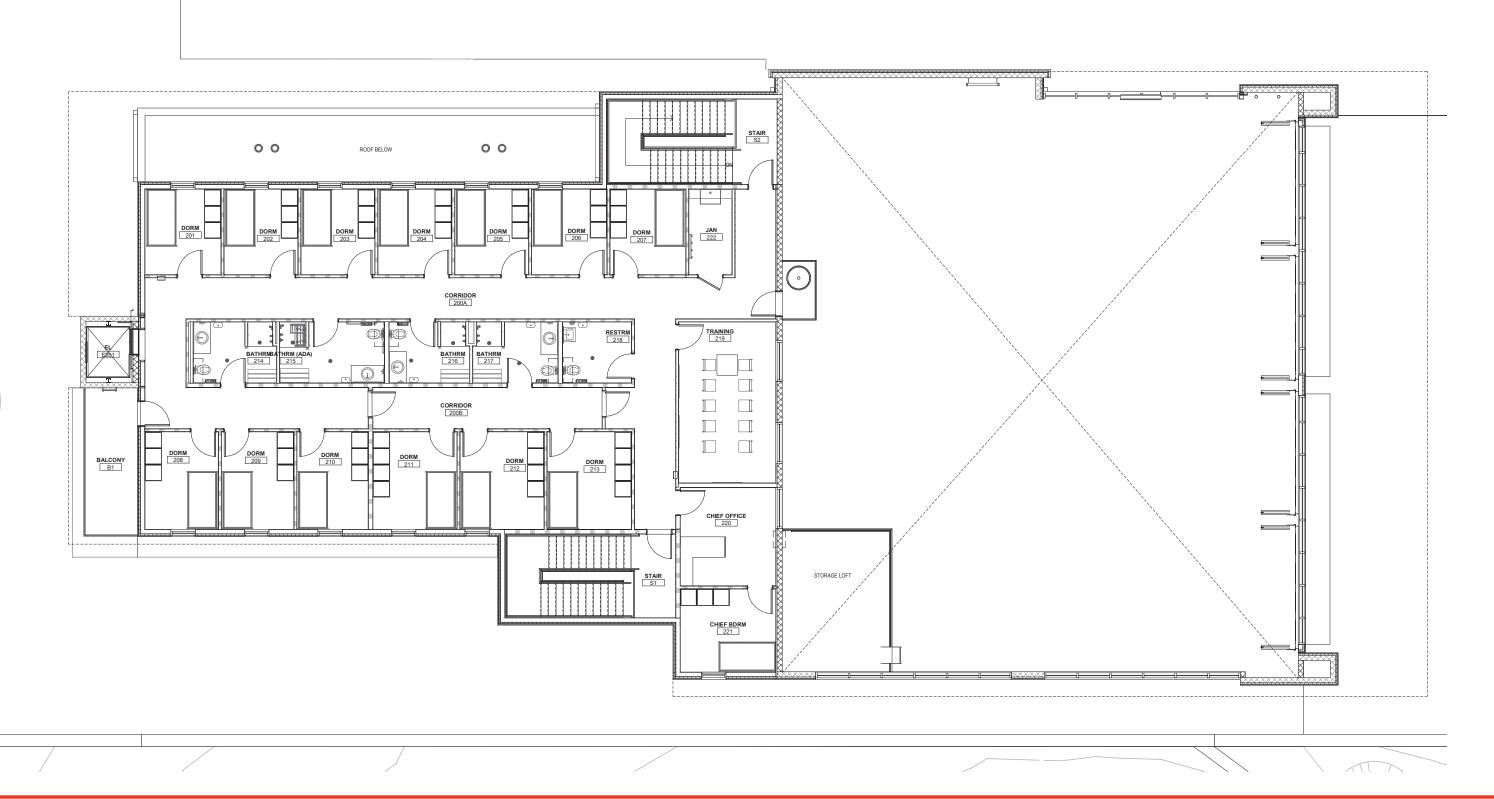








GROUND LEVEL FLOOR PLAN









































SUSTAINABILITY OVERVIEW

Certification Goal:

LEED 4.0 Silver

Location and Transportation: site location challenging for credits. 10 of 16 credits are NO.

Sustainable Sites: concrete pavement key for Heat Island reduction.

Water Efficiency: water use reduction & additional metering

Energy and Atmosphere: enhanced commissioning, photovoltaic panels, and increased energy performance through envelope design

Materials and Resources: building product disclosures and waste management

Indoor Environmental Quality: low-emitting materials & indoor air quality management

Innovation: IPM, Green Housekeeping, education outreach, Pilot

Regional Priority: Additional points for using photovoltaic panels



LEED v4 for BD+C: New Construction and Major Renovation

Project Checklist

Y ? N	Integrative Process	1							
6 0 0 10 Locatio	on and Transportation	16	4	2	2	5	Mate	rials and Resources	13
	LEED for Neighborhood Development Location	16	Y	_	_		Prereq	Storage and Collection of Recyclables	Required
	Sensitive Land Protection	1	Y				Prereq	Construction and Demolition Waste Management Planning	Require
1 1 Credit	High Priority Site - project does not qualify	2		1	2	2	Credit	Building Life-Cycle Impact Reduction	5
	Surrounding Density and Diverse Uses	5	1			1	Credit	Building Product Disclosure Optimization - Environmental Product Declarations	2
	Access to Quality Transit	5	1			1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
	Bicycle Facilities	1	1			1	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
	Reduced Parking Footprint - zoning requirements? 40% reduction required	1	1	1			Credit	Construction and Demolition Waste Management	2
1 Credit (Green Vehicles - v4.1 allow 6% infrastructure	1						•	
			6	2	3	5	Indoo	or Environmental Quality	16
5 3 2 0 Sustain	nable Sites	10	Υ				Prereq	Minimum Indoor Air Quality Performance	Require
Y Prereq (Construction Activity Pollution Prevention	Required	Υ				Prereq	Environmental Tobacco Smoke Control	Require
1 Credit S	Site Assessment	1	1	1			Credit	Enhanced Indoor Air Quality Strategies	2
2 Credit S	Site Development - Protect or Restore Habitat	2	2	1			Credit	Low-Emitting Materials	3
1 Credit C	Open Space	1	1				Credit	Construction Indoor Air Quality Management Plan	1
1 2 Credit F	Rainwater Management	3			1	1	Credit	Indoor Air Quality Assessment - flushout or testing	2
2 Credit	Heat Island Reduction	2	1				Credit	Thermal Comfort - controllability	1
1 Credit L	Light Pollution Reduction - BUG	1	1		1		Credit	Interior Lighting - 90% individual occupant spaces - 3 levels	2
						3	Credit	Daylight	3
4 0 0 7 Water E	Efficiency	11			1		Credit	Quality Views	1
Y Prereq (Outdoor Water Use Reduction	Required				1	Credit	Acoustic Performance	1
Y Prereq I	Indoor Water Use Reduction	Required					•		
Y Prereq E	Building-Level Water Metering	Required	5	1	0	0	Innov	ration	6
1 1 Credit (Outdoor Water Use Reduction	2	4	1			Credit	Innovation - LED Lighting, Innovation, Pilot, Educational, EP, Composting	5
2 4 Credit I	Indoor Water Use Reduction	6	1				Credit	LEED Accredited Professional	1
2 Credit (Cooling Tower Water Use	2					•		
1 Credit \	Water Metering	1	2	0	1	3	Regio	onal Priority	4
			1			1	Credit	Regional Priority: Renewable Energy Production	1
23 0 1 9 Energy	and Atmosphere	33				1	Credit	Regional Priority: Outdoor Water Use Reduction	1
Y Prereq F	Fundamental Commissioning and Verification	Required			1	1	Credit	Regional Priority: Rainwater Management	1
Y Prereq	Minimum Energy Performance	Required	1				Credit	Regional Priority: Optimize Energy Performance	1
Y Prereq E	Building-Level Energy Metering	Required							
Y Prereq F	Fundamental Refrigerant Management	Required	56	8	9	39	TOTA	ALS Possible Poi	ints: 110
5 1 Credit E	Enhanced Commissioning - before end of DD, measurement	6					Cert	ified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110	
13 5 Credit C	Optimize Energy Performance	18							

Project Name: Davenport Ranch Fire EMS Station

Date: 08.02.2021



CITY OF AUSTIN DAVENPORT RANCH FIRE/EMS STATION DESIGN COMMISSION | SEPTEMBER 27, 2021