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FRANK VARGAS DC3236  
BRAVE ARCHITECTURE  
4617 MONTROSE BLVD STE G230  
HOUSTON TX 77006-6139



**Tunxis Community College**  
Farmington, Connecticut  
Architect: Du Bose Associates, Inc. Architects

# Cypress Creek YMCA Programs Building

Houston, Texas

## Architect

Architect: **BRAVE / ARCHITECTURE**

The Cypress Creek YMCA Programs Building is a facility near the existing Cypress Creek YMCA. During the process of developing a program for the facility the firm also did a master plan for the entire Cypress Creek YMCA site. The site consists of a lush wooded area with a lake, athletic fields, a running trail and campus style buildings spread out over the site. The building's location was selected to bring many of these elements together connecting the athletic fields and additional parking with the main campus building. The new Programs Building is a welcome addition to this arrangement of existing buildings and site organization.

The Programs Building was planned on an existing YMCA site situating the building within the 100-year flood plain and the revised 10-year flood plain set up after Tropical Storm Allison and adopted in June 2007. Often, the 10-year flood plain places more stringent conditions on the elevation of the finished floor. In this case it put the finished floor of the structure 24 inches above the base flood elevation. To accomplish this, the slab was raised and the site was regraded with approximately 5'-0" of select fill. Because of the building's increase in elevation, the landscaping design focused on transitioning gradually to surrounding lower areas around the building. Accordingly, storm mitigation was reevaluated, enlarging the existing lake on the site.

The Programs Building serves approximately 300 children for after-school and summer programs. Clad in metal panels and stone, the pre-engineered steel structure offered flexibility in the floor plan's organization, allowing all secondary programmatic spaces to center around the large exercise room.

The organization and design of the floor plan was to increase the possibilities of multi-functionality. Additionally, these spaces surround the central room with varying degrees of privacy. The dance room with parent's viewing area is placed to the side as it is used as a space for practice and performance – requiring additional control of privacy and ambient noise. The



Photos Courtesy of BRAVE / ARCHITECTURE - Angela Martinez, Christian Sheridan, AIA

viewing room provides this extra buffer between the dance room and exercise room. A large multi-purpose room is located down the main axis and provides a larger, more private space for meetings or other activities. Two smaller multi-purpose rooms open directly onto the exercise room and can be closed off from the space with large garage doors. When these doors are open the square footage of the exercise room increases by almost a third. The programmatic challenge was to not limit the types or number of uses for each space. This multi-functional characteristic of these rooms was a necessity and extends throughout the building's various spaces. A reception area with administrative offices greets everyone entering the building from the entry courtyard and canopy. This canopy, constructed of rough sawn timber and aluminum, continues the multi-use theme by providing cover for exterior circulation as well as protected space for outdoor activities.

The size and occupancy of the building requires it to be fitted with sprinklers by code. Because of its location in a rural area on the outskirts of Houston where existing water lines are scarce, fitting the building with sprinklers would have been cost-prohibitive. The solution was to divide the building into two smaller buildings separated by a two-hour fire separation wall. The wall was strategically placed as to go unnoticed and yet to allow for the functional flexibility of the floor plan's activity spaces.

Project Management for this project was done by The Mathis Group. They do much of the construction coordination for the Houston Family YMCA's renovation and new construction projects. BRAVE / ARCHITECTURE has teamed with TMG on a few of these projects and this repetition of the team's framework has made the communication and coordination during design and construction a near seamless effort.

BRAVE / ARCHITECTURE has designed many projects for the Greater Houston YMCA. In the past 10 years the firm has worked with them on the programming and design for several renovations and new buildings. In doing so, there is an excellent understanding between the Owner and Architect concerning the needs and goals that the facilities need to meet. Continuing this working relationship, BRAVE / ARCHITECTURE is currently working on the construction documents for the renovation of and addition to the existing Cypress Creek YMCA building. More importantly, this will bring the entire facility up to the latest standards and fulfill their member's needs as one of the largest YMCA's nationwide.

## Manufacturers

**DV. 8:** Entrances & Storefronts, Windows: Vistawall.

**DV. 9:** Acoustical: Armstrong, USG; Specialty Floor: ActionCush.

**DV. 13:** Pre-Engineered Building: Alliance.

**DV. 26:** Lighting: Lithonia, Lightolier, Bega.

## CIVIC CV090928

Cypress Creek YMCA Programs Building

### Architect

**BRAVE / ARCHITECTURE**  
4617 Montrose Boulevard, #C230, Houston, TX 77006  
www.bravearchitecture.com

### Construction Team

**Structural Engineer:**  
CSF Civil, Structural & Forensic Engineering Solutions  
11210 Steeplecrest Drive, #202, Houston, TX 77065

**General Contractor:**  
Primelex Corporation  
6523 Craigway Road, Spring, TX 77389

**Project Manager:**  
The Mathis Group  
13135 Dairy Ashford Road, #390, Sugar Land, TX 77478

**Electrical Engineer:**  
Windrose Electrical Services – Design Build  
11320 FM 529 Rd. #C, Houston, TX 77041

**Mechanical Engineer:**  
Custom Mechanical – Design Build  
17223 Winding Oak Court, Cypress, TX 77429



### Project General Description

**Location:** Houston, Texas

**Date Bid:** July 2007

**Construction Period:** Aug 2007 to Oct 2008

**Total Square Feet:** 17,000 **Site:** 0.75 acre.

**Number of Buildings:** One.

**Building Size:** First floor, 15,255; upper level storage and mechanical mezzanine (accessible by pull down ladder), 1,745; total, 17,000 square feet.

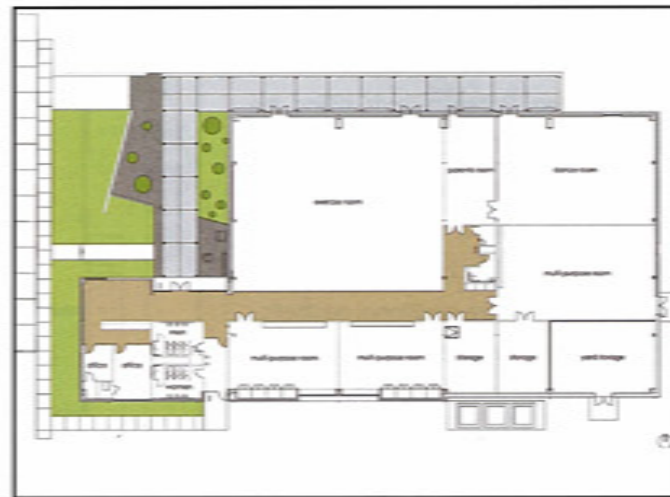
**Building Height:** First floor, 29' 7 1/4"; total, 29' 7 1/4".

**Basic Construction Type:** New/IB/Pre-Engineered.

**Foundation:** Cast-in-place, reinforced, slab-on-grade.

**Exterior Walls:** Metal, cast stone. **Roof:** Metal, cool tar built up.

**Floors:** Concrete. **Interior Walls:** CMU, metal stud drywall.



### C.S.I. Divisions

		COST	% OF COST	SQ.FT. COST
1.	1.	—	—	—
3.	3.	239,203	12.26	14.07
4.	4.	188,219	9.65	11.07
5.	5.	87,272	4.47	5.13
6.	6.	283,832	14.55	16.70
7.	7.	87,861	4.50	5.17
8.	8.	58,674	3.01	3.45
	8.	140,902	7.22	8.29
9.	9.	242,984	12.45	14.29
10.	10.	22,300	1.14	1.31
11.	11.	18,944	0.97	1.11
12.	12.	3,300	0.17	0.19
13.	13.	113,612	5.82	6.68
15.	22.	97,621	5.00	5.75
15.	23.	175,507	9.00	10.33
16.	26.	190,727	9.79	11.22
	<b>TOTAL BUILDING COSTS</b>	<b>1,950,958</b>	<b>100.00</b>	<b>\$114.76</b>
2.	31.	183,482		
2.	32.	66,465		
2.	33.	9,640		
	<b>TOTAL</b>	<b>2,210,545</b>		

### SPECIFICATIONS

Forming & accessories, reinforcing, cast-in-place.
Unit.
Structural metal framing, cold-formed metal framing, fabrications, decorative metal.
Rough carpentry, finish carpentry, architectural woodwork.
Dampproofing & waterproofing, thermal protection, membrane roofing, joint protection.
Doors & frames, specialty doors & frames, entrances, storefronts, & curtain walls, hardware.
Plaster & gypsum board, ceilings, flooring, wall finishes, painting & coating.
Interior:
Athletic & recreational, other.
Other.
Pre-engineered building.
Piping & pumps, fixtures, equipment.
Piping & pumps, air distribution, air cleaning devices, central heating, central cooling, central HVAC.
Medium-voltage distribution, low-voltage transmission, lighting.
Site clearing, earth moving, earthwork methods, excavation support & protection.
Improvements, wetlands, planting.
Sanitary, storm.
(Excluding architectural and engineering fees)

**UPDATED ESTIMATE TO OCTOBER 2009: \$125.96 PER SQUARE FOOT**

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