

# General Project Information



## **Outdoor Learning Center Renovations**

**Project:** Renovations at Outdoor Learning Center (OLC)

**Project Description:** Renovations of the OLC to include life safety, fire and ADA code compliance, safety and security, interior finishes, HVAC, plumbing, and electrical system replacements, roofing and waterproofing of the buildings. Project will also address site and infrastructure issues.

**Project Priority:** 1

**Background & Justification:** Since the facility opened in 1982, it has not undergone any type of renovation or upgrade other than routine maintenance. The facility needs extensive renovations to the Mechanical, Electrical, and Plumbing (MEP) systems, installation of a fire alarm system, emergency generator for lighting and life safety systems, public address system, and modifications to comply with ADA. The electrical service feeding the facility is District-owned and requires replacement of the poles. The electrical service route needs to be altered to allow a fire lane into the facility to be built. This fire lane will permit emergency service vehicles access to the buildings and teaching areas. With the addition of roads, sidewalks and parking, the site will need detention be built to comply with county flood control requirements. The site lighting will be upgraded and the complex will receive security cameras, and intrusion alarms.

### **About the OLC**

The Welch Outdoor Learning Center, established in 1981, is a facility owned and operated by the Katy Independent School District. The center is named after Kenneth Welch who played a key role in the planning stages of the center and making the outdoor learning center idea a reality. The OLC, as it is most often called, is located about 1/4 mile west of the Katy ISD Administration building at 6301 South Stadium Lane, Katy, Texas.

The facility consists of 34.5 acres of land, much of which is wooded. The buildings on the site include a science classroom/museum, a caretaker's cottage, a history classroom/museum, and a large barn and a barnyard. The barnyard includes a windmill, a variety of farm animals and a small pond. A large garden area is located behind the barnyard area. A smaller demonstration garden is located across the street from the front of the barn. The center also has hard surface roads to the buildings, a 1.3 acre pond with piers and a bridge, and several wooded nature trails.

### **Mission**

The Katy ISD Welch Outdoor Learning Center provides students with instructional opportunities that enrich and extend the district's science, social studies and physical education curriculums in a unique, stimulating and meaningful learning environment outside the traditional classroom setting, in cooperative partnership with students, teachers, parents, administrators and community.

### **Learning Experiences**

The Welch Outdoor Learning Center (OLC) 4th grade field trip experience supports and is aligned to the Katy ISD science and social studies curriculum. It provides students with the opportunity to engage in:

- A stimulating and meaningful environment outside the classroom
- Inquiry experiences which enhance higher order thinking skills
- An environment where skills and knowledge are applied
- A connection to the real world

### **Science: 4th Grade OLC Science Lesson: Adaptations**

The science classroom at the Welch Outdoor Learning Center houses a diverse collection of exhibits, displays and specimens which are used to teach the fourth grade lesson, "Adaptations in Living Organisms."

Six "Adaptation" learning stations are set up in the science classroom:

- With assistance from the teacher, parent volunteers, and OLC staff, the students rotate to each station using task cards to guide their exploration. Curriculum aligned lesson activities to help prepare teachers and students for their OLC field trip are provided to teachers on the Katy ISD elementary science wiki. Post-visit lesson activities are also available.

### **Social Studies: 4<sup>th</sup> Grade OLC Social Studies Lesson: Pioneer Life**

The history classroom at the Welch Outdoor Learning Center houses a teaching historical museum and a one room schoolhouse which are used to teach the fourth grade lesson, "Pioneer Life – Early Schools & Artifacts." The lesson is divided into two separate activities: a one room schoolhouse simulation and an artifacts data gathering investigation.

#### The Pioneer Schoolhouse

This activity is a simulation of a school day in the life of a child attending a one room schoolhouse in the mid to late 1800's. Students read and recite from pioneer era books; do a math lesson using slate boards and chalk; participate in a spelling bee; and learn about pioneer classroom rules and consequences. The teacher and students may choose to wear "period clothing" over their regular clothing if desired, pump water from the barnyard well, and enjoy pioneer games during recess.

#### The Historical Artifacts

Many historical artifacts are on display in the history classroom. Fifty of the artifacts are numbered and grouped into one of three areas containing additional artifacts: General Store Artifact, Indian Artifacts, and Pioneer Home Artifacts.

Teachers and parent volunteers are facilitators for each area as students work with partners and move around to observe the artifacts and discover how they were used by the early pioneers.

### **Science: 1st Grade Chick Hatching**

All KISD first grade students participate in an outreach incubator chick hatching lesson focused on Katy ISD science curriculum supported and coordinated by the OLC. Campus IC's are trained in the operation of the incubators and work with the teachers. The OLC acquires, maintains, stores and distributes the incubators, fertilized eggs, and other materials needed for this lesson and directly supports in the training and operation of the incubators.

### **Angler Clubs and Outdoor Adventure Education**

The Welch Outdoor Learning Center maintains a 1.3 acre pond stocked with primarily catfish. Students from KISD campuses use this resource in support of their PE angler clubs and/or as an extension of their physical education/outdoor adventure education unit. This school year the OLC will support 12 elementary/secondary fishing clubs and 13 outdoor adventure education field trips, during school, after school or on weekends.

### **Folk Life Festival**

For the last 32 years the Welch Outdoor Learning Center has held an annual Folk Life Festival open to the public. During the festival the Katy ISD Outdoor Learning Center is transformed into scenes of the late 1800's, as many demonstrations and activities of pioneer life are recreated. Concessions are provided to the public by Chick-fil-A Katy Mills. The 2017 Folk Life Festival involved over 100 presenters manning 36 activity locations. There were over 100 student volunteers from both public and private schools in the Katy area that logged hours in support of the festival. Total attendance for the 2017 festival was approximately 3500 people.

### **Summer Recreation Program**

The Welch Outdoor Learning Center offers a popular summer recreation program which provides application of science, social studies and physical education concepts. Students going into grades 3-7 may register for a single 2 week session which meets for 90 minutes each weekday – Monday through Friday.

Activities Include: Fishing Skills and Safety, Archery Skills and Safety, Canoeing Skills and Safety, Candle Dipping, Flying Homing Pigeons, Making Hand-Cranked Ice Cream, Nature Trails, Outdoor Cooking, Farm Animals, Air Rifle Skills and Safety, Games and Crafts, and Dulcimer Lessons. Summer recreation instructors are KISD employees who work to make the program incredibly popular and successful.

### **Scouting**

The Welch Outdoor Learning Center has a long tradition of both supporting and benefiting from the various Boys and Girls Scout troops in the Katy area. Scout troops use the OLC grounds several times a year to conduct their Arrow of Light and Bridging ceremonies. The OLC also serves as a beneficiary of many Eagle Scout projects. In the last year such projects have included: a new bridge at the pond, a stone fire-pit in the Native American Village area, a picket

fence around the display garden, a new wooden deck for the summer recreation classes, and several replacement picnic tables and benches.

### **Texas Parks and Wildlife**

In the last few years the Welch Outdoor Learning Center has developed a strong partnership with Texas Parks and Wildlife. The science classroom is used for TPWD Hunter Education, Angler Education, Boater Education and National Archery in the Schools Program. KISD teachers are provided the opportunity to attend these complimentary classes for staff development opportunities and also receive free instructional materials. Katy ISD was recognized as a premier district by Texas Parks and Wildlife for its support of outdoor education programs.