



Marble Falls Independent School District

ENERGY EFFICIENT LED LIGHTING UPGRADE OVERVIEW AND RECOMMENDATION TO BOARD OF EDUCATION

Excel Energy Group has designed a district-wide LED lighting upgrade project for the Marble Falls Independent School District. The scope of the project will include the replacement or retrofit of all the District's approximately 6,000 interior lighting fixtures with premium LED lighting, including major cosmetic upgrades through new fixtures in place of damaged, obsolete, or unsightly old fixtures, and new LED gym lighting where not already LED. A large portion of the project will improve lighting in areas that have inadequate light levels. Occupancy sensors will be installed in each school upgraded. Typical areas receiving sensors are classrooms, hallways, and communal restrooms with recessed ceilings. Fluorescent emergency lighting removed will be replaced with new LED emergency lighting to comply with code requirements for the District. Exterior lighting as well as sports field lighting are excluded from this project scope.

This is a fully turn-key proposal that includes all engineering, design, procurement of tier 1 quality material, installation, disposal of old material, measurement and verification, licensing, permitting, guaranteeing of IES lighting standards for each space, project management and warranty.

All work will be performed at nights and on weekends so that no school activity is disrupted. The project is expected to take 3-5 weeks to install and can start as early as this summer.

Building Summaries:

Colt Elementary		\$67,685
-	Total Fixtures:	743
-	Total Sensors:	22

Upgrading existing fluorescent, incandescent, compact fluorescent, and HID lighting technology to LED lighting. The primary fixture type in this school will be a 3-lamp recessed fixture that will be retrofitted to three 10.5w LED Type B tubes. Occupancy sensors to be installed in recessed ceiling areas of the following room types: classrooms, offices, restrooms, and hallways. NEW LED emergency lighting will replace existing fluorescent emergency ballasts.

High School		\$220,028
-	Total Fixtures:	2,259
-	Total Sensors:	163

Upgrading existing fluorescent, incandescent, compact fluorescent, and HID lighting technology to LED lighting. The primary fixture type in this school will be a two lamp or three lamp recessed fixture that will be retrofitted to three 10.5w LED Type B tubes. Seventy-eight fixtures were identified as damaged, obsolete, or unsightly and will be replaced with NEW LED fixtures for cosmetic purposes. Compact fluorescent can lights will be upgraded with new type B LED bulbs. Occupancy sensors to be installed in recessed ceiling areas of the following room types: classrooms, offices, restrooms, and hallways. NEW LED emergency lighting will replace existing fluorescent emergency ballasts.

Highland Lakes ES	<u>\$84,474</u>
- Total Fixtures:	676
 Total Sensors: 	104

Upgrading existing fluorescent, incandescent, compact fluorescent, and HID lighting technology to LED lighting. The primary fixture type in this school will be a three-lamp recessed fixture that will be retrofitted to three 10.5w LED Type B tubes. Occupancy sensors to be installed in recessed ceiling areas of the following room types: classrooms, offices, restrooms, and hallways. NEW LED emergency lighting will replace existing fluorescent emergency ballasts.

Marble Falls Elementary \$57,071

-	Total Fixtures:	524

-	Total Sensors:	40
-	Total Sensors:	40

Upgrading existing fluorescent, incandescent, compact fluorescent, and HID lighting technology to LED lighting. The primary fixture type in this school will be a two lamp or three lamp recessed fixture that will be retrofitted to three 10.5w LED Type B tubes. Compact fluorescent can lights will be upgraded with new type B LED bulbs. Occupancy sensors to be installed in recessed ceiling areas of the following room types: classrooms, offices, restrooms, and hallways. NEW LED emergency lighting will replace existing fluorescent emergency ballasts.

Middle School	<u>\$144,949</u>
- Total Fixtures:	1,257
 Total Sensors: 	112

Upgrading existing fluorescent, incandescent, compact fluorescent, and HID lighting technology to LED lighting. The primary fixture type in this school will be a two lamp or three lamp recessed fixture that will be retrofitted to three 10.5w LED Type B tubes. Existing four lamp fluorescent recessed fixtures will be retrofitted to two-10.5w LED bulbs with center brackets. Thirteen fixtures were identified as damaged, obsolete, or unsightly and will be replaced with NEW LED fixtures for cosmetic purposes. Compact fluorescent can lights will be upgraded with new type B LED bulbs. Occupancy sensors to be installed in recessed ceiling areas of the following room types: classrooms,

offices, restrooms, and hallways. NEW LED emergency lighting will replace existing fluorescent emergency ballasts.

Spicewood Elementary \$63,142

-	Total Fixtures:	599
-	Total Sensors:	62

Upgrading existing fluorescent, incandescent, compact fluorescent, and HID lighting technology to LED lighting. The primary fixture type in this school will be a three-lamp recessed fixture that will be retrofitted to three 10.5w LED Type B tubes. Occupancy sensors to be installed in recessed ceiling areas of the following room types: classrooms, offices, restrooms, and hallways. NEW LED emergency lighting will replace existing fluorescent emergency ballasts.

Total:	\$637,348
Contingency:	\$30,000
Total contract value:	\$667,348