

# ***Maintenance Bond Projects 2024 Bond Planning Committee***

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NBISD Director of Facilities



	Benefits	Challenges
<b>Reactive</b> (0-3 Years Out)	<ul style="list-style-type: none"><li>• Maximum utilization and production value from asset</li></ul>	<ul style="list-style-type: none"><li>• Unplanned downtime</li><li>• Potential for further damage to the asset</li><li>• Higher maintenance costs</li></ul>
<b>Preventive</b> (3-5 Years Out)	<ul style="list-style-type: none"><li>• Lower maintenance costs</li><li>• Less equipment malfunction and unplanned downtime</li></ul>	<ul style="list-style-type: none"><li>• Need for spare part and inventory management</li><li>• Increased planned downtime</li><li>• Maintenance on seemingly perfect assets</li></ul>



## Executive Summary – Total Maintenance Cost

<i><b>Reactive Cost (0-3 Years Out)</b></i>	<i><b>Proactive Cost (3-5 Years Out)</b></i>
HVAC	HVAC
Roofing	Roofing
Lighting	
Windows	
Sidewalks & Parking	
MEP Systems	



<u>HVAC</u>	<u>(0-3 Years)</u>		<u>Totals</u>		<u>HVAC</u>	<u>(3-5 Years)</u>		<u>Totals</u>
Memorials - All Campuses & Automation			\$ 550,000.00		Klein Road			\$ 550,000.00
Lone Star Units & Automation			\$ 650,000.00		Technology Building			\$ 650,000.00
Lamar Original Wing & Automation			\$ 1,576,000.00		Oak Run Rotunda Rooftops			\$ 1,100,000.00
Walnut Springs Chiller			\$ 283,000.00					
Support Services HVAC System			\$ 217,000.00					
Automation Integration / Updates			\$ 180,000.00					
Seele Elementary & Automation			\$ 1,100,000.00					
Carl Schurz Elementary & Automation			\$ 1,400,000.00					
		<u><b>TOTAL</b></u>	<u><b>\$ 5,956,000.00</b></u>				<u><b>TOTAL</b></u>	<u><b>\$ 2,300,000.00</b></u>



## District Automation System

### Project Cost

#### LEGACY SITES System UPGRADES

LAMAR	\$ 280,000
CENTRAL KITCHEN	\$ 50,000
MEMORIAL	\$ 115,000
WALNUT SPRINGS	\$ 115,000
COUNTY LINE	\$ 105,000
LONE STAR	\$ 250,000

#### NATIVE SITES Device UPGRADES

OAK RUN	\$ 15,000
KLEIN ROAD	\$ 15,000
TRANSPORTATION	\$ 15,000
9 <sup>TH</sup> GRADE CENTER	\$ 15,000

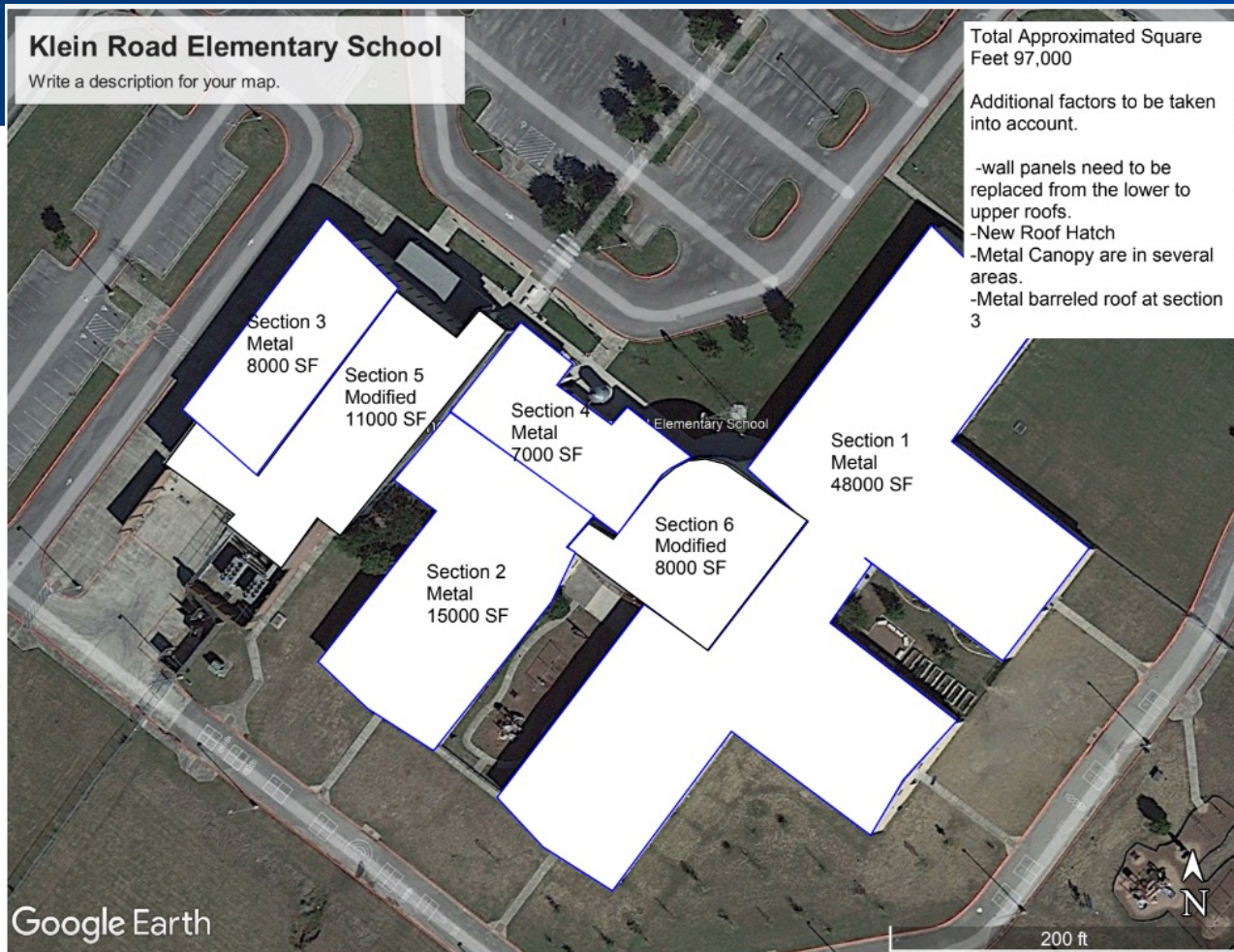
#### TRANE SITES System INTEGRATION

VOSS FARMS	\$ 30,000
VERMENDI	\$ 30,000
NEW MIDDLE SCHOOL	\$ 30,000
ES#10 LEGEND POND	\$ 30,000

*\*Totals are embedded in Districts total HVAC funding model*



<u>Roofing</u>	<u>(0-3 Years)</u>		<u>Totals</u>	<u>Roofing</u>	<u>(3-5 Years)</u>		
Academy St Gym			\$ 393,750.00	Klein Road			\$ 704,900.00
Lamar			\$ 745,180.00	Memorial			\$ 3,059,000.00
Oak Run			\$ 1,793,330.00	Oak Run			\$ 2,374,210.00
Walnut Springs			\$ 2,394,000.00	County Line			\$ 2,485,200.00
Technology (1040 Walnut - Admin)			\$ 559,250.00				
Carl Schurz			\$ 1,080,000.00				
		<u>TOTAL</u>	<u>\$ 6,965,510.00</u>			<u>TOTAL</u>	<u>\$ 8,623,310.00</u>







# Lighting

## LED Retrofits and Upgrades

Campus	Area (Square Ft)
New Braunfels HS*	338,500
Oak Run MS	161,000
Carl Schurz ES	54,300
County Line ES	62,300
Long Creek (Existing)	198,000
Administration	51,500
DAEP**	15,800
Support Services	19,500
Klein Rd ES	90,000
Lamar ES	65,200
Early Childhood Center	55,200
Memorial ES	65,100
Transportation	11,800
Veramendi ES	102,000
Voss Farms ES	93,000
Walnut Springs ES	60,600

These campuses use a variety of Lighting Technology. There are T-12, T-8, and T-5 Fluorescent lighting technology, metal-halide, and LED. We propose replacing the interior and exterior lighting with LED.

\* The budget below does NOT include any LED upgrades at New Braunfels HS.



Typical Lighting Fixtures

Budget	% Electric Savings
<b>\$1,500,000</b>	<b>12%-18%</b>





## FACILITY DASHBOARD

*Multiple Campuses – Carl Schurz, Seele, Lamar,  
Lone Star Early Childhood, Memorials*



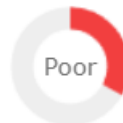
**Windows:** Replace wooden window unit at cafeteria. Replace all window units on B, E and D wing. Recaulk around all window frames on G and K wings and Cafeteria curtain walls.



**Windows:** Numerous window concerns observed and improvement recommendations provided.



**Windows:** The original single-pane windows are in need of replacement.



**Windows:** The older exterior windows are in need of replacement. Cleaning and resealing of newer windows recommended.



TYPE (AS APPLICABLE)	% OF BUILDING/QTY	LEVEL OF ACTION	% OF SYSTEM OR FINISH	AUTOMATED BUDGET ESTIMATE	NOTES
Plumbing					
● Plumbing Fixtures	253	Moderate	15 %	\$143,490.36	Replace damaged restroom accessories, toilets and fixtures.
● Domestic Water Distribution	100%	Replace	100 %	\$704,154.47	Replace infrastructure on B, E, D, G and Cafeteria buildings.
● Sanitary Waste	100%	Replace	100 %	\$121,466.64	Replace infrastructure on B, E, D, G and Cafeteria buildings.
Electrical					
● Electrical Service & Distribution	100%	Replace	69 %	\$343,156.04	Mechanical systems over 30 years old should be considered for replacement.
● Lighting and Branch Wiring	100%	Replace	69 %	\$761,628.70	Consider replacing electrical systems that are over 30 years old in the B, E, D, G and Cafeteria buildings. Lighting levels in classrooms are on lower end, recommended upgrading lights to LED's
<b>Executive Summary</b>					
Originally built in 1923 with various additions over the years, the east end of Lamar Elementary is in need of numerous improvements. Almost all building systems are in need of repair or replacement, giving these structures a Facility Condition Index of 99%. The district should consider replacement of many of the older buildings currently present on the campus or plan to perform comprehensive renovations of the structures. Major projects needed include the following building systems: foundation, exterior structure, roofing, HVAC, security, flooring, electrical, interior surfaces, doors, windows, and others. Costs associated with HVAC replacement are included in both this site and 2002 Additions.					



## FACILITY DASHBOARD

### Facility Scorecard



**Name:** Lamar Elementary - Original Buildings and Older Additions (...)



**Address:** 240 N. Central | New Braunfels, TX 78130



**Year Built:** 1923

# Parking Lots and Sidewalks



***Oak Run Middle School***



***New Braunfels Middle School***



## Executive Summary – Total Maintenance Cost

Reactive Cost (0-3 Years Out)		Proactive Cost (3-5 Years Out)	
HVAC	\$5,956,000	HVAC	\$2,300,000
Roofing	\$6,965,510	Roofing	\$8,623,000
Lighting	\$1,500,000		
Windows*	\$1,540,800		
Sidewalks & Parking	\$950,000		
MEP Systems**	\$5,725,000		
<b>Total</b>	<b><u>\$22,637,310</u></b>	<b>Total</b>	<b><u>\$10,923,000</u></b>
<i>* Budget from TASB Dashboard Model</i>			
<i>** Systems at Carl Schurz, Seele, Lone Star, Lamar</i>			