

Westport Public Schools Building Envelope Studies



Process:

1. Kicked off with architects and Manager of Facilities by walking each school.
2. Architect conducted on-site facilities evaluations and investigations.
3. Interviewed staff at each school.
4. Studied construction documents (when available).
5. Conducted blower door pressure tests.
6. Conducted thermal roof scans via drone cameras.
7. Created report of exterior building condition narratives.
8. Created spreadsheets detailing the specific repair or maintenance issues or deficiencies.
9. Suggested recommendations including corrective actions, prioritization and associated costs.

Typical Spreadsheet Evaluation:

STAPLES HIGH SCHOOL FACILITY CONDITION AND CODE EVALUATION ANALYSIS EXTERIOR ENVELOPE REPAIRS AND IMPROVEMENTS Date : November 2023				
	Corrective Action	Estimated Cost	Remarks	System
areas.	Repoint as necessary.	\$10,000.00		A
	Repair with mortar infill.	\$2,500.00		A
windows in older	Remove old caulk and install new backer rod and caulk.	\$10,000.00		A
as of building due to	Remove lintels, provide adequate flashing, reinstall and caulk. Suggest exploratory demolition on one unit prior to finalizing repair details.	\$85,000.00		A
throughout exterior.	Remove as necessary.	\$1,500.00		A
is.	Sand, prime and paint as necessary.	\$6,000.00		A
	Remove with acid wash, observe to see if it returns.	\$3,000.00		A

Bedford Middle School: 83,975 SF

- Facade Improvements Estimates: \$423,500
- Window Improvements Estimates: \$45,000
- Door Improvements Estimates: \$18,000
- Roof Improvements Estimates: \$3,750,000
- Total with 15% contingency: \$4,871,975 = \$58.17/SF



Bedford Middle School: Facades Improvements

- Facades Improvements Estimates: \$423,500



- Recaulk all wall penetrations: \$5,000
- Remove moss & lichen along North sides of building: \$15,000
- Modify existing metal panels to create true rainscreen system: \$400,000
- Patch foundation cracks: \$3,500

Bedford Middle School: Window Improvements

- Window Improvements Estimates: \$45,000



- Moss & lichen removal included in facades improvements
- Recaulk windows as needed to create weathertight envelope



Bedford Middle School: Door Improvements

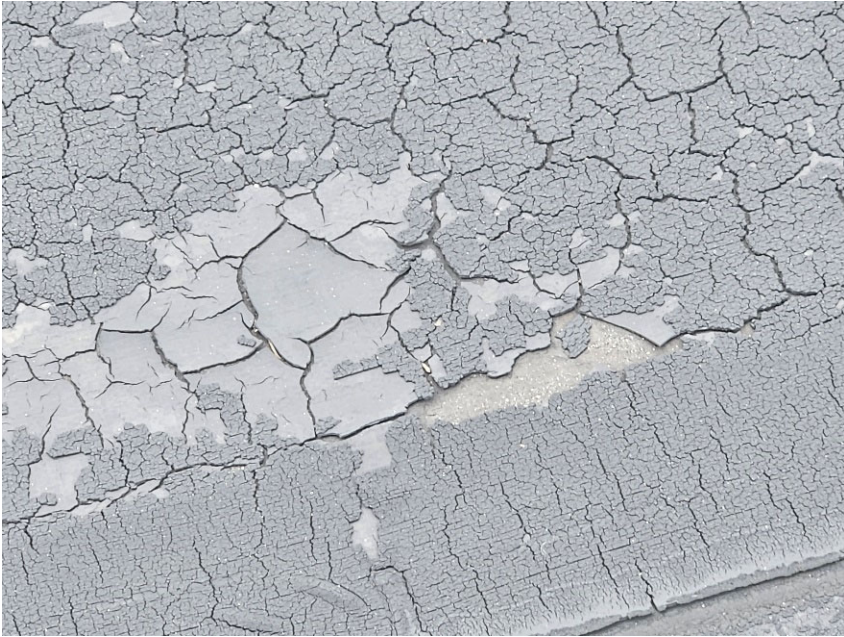
- Door Improvements Estimates: \$18,000



- Install new gaskets & weatherstripping: \$18,000

Bedford Middle School: Roof Improvements

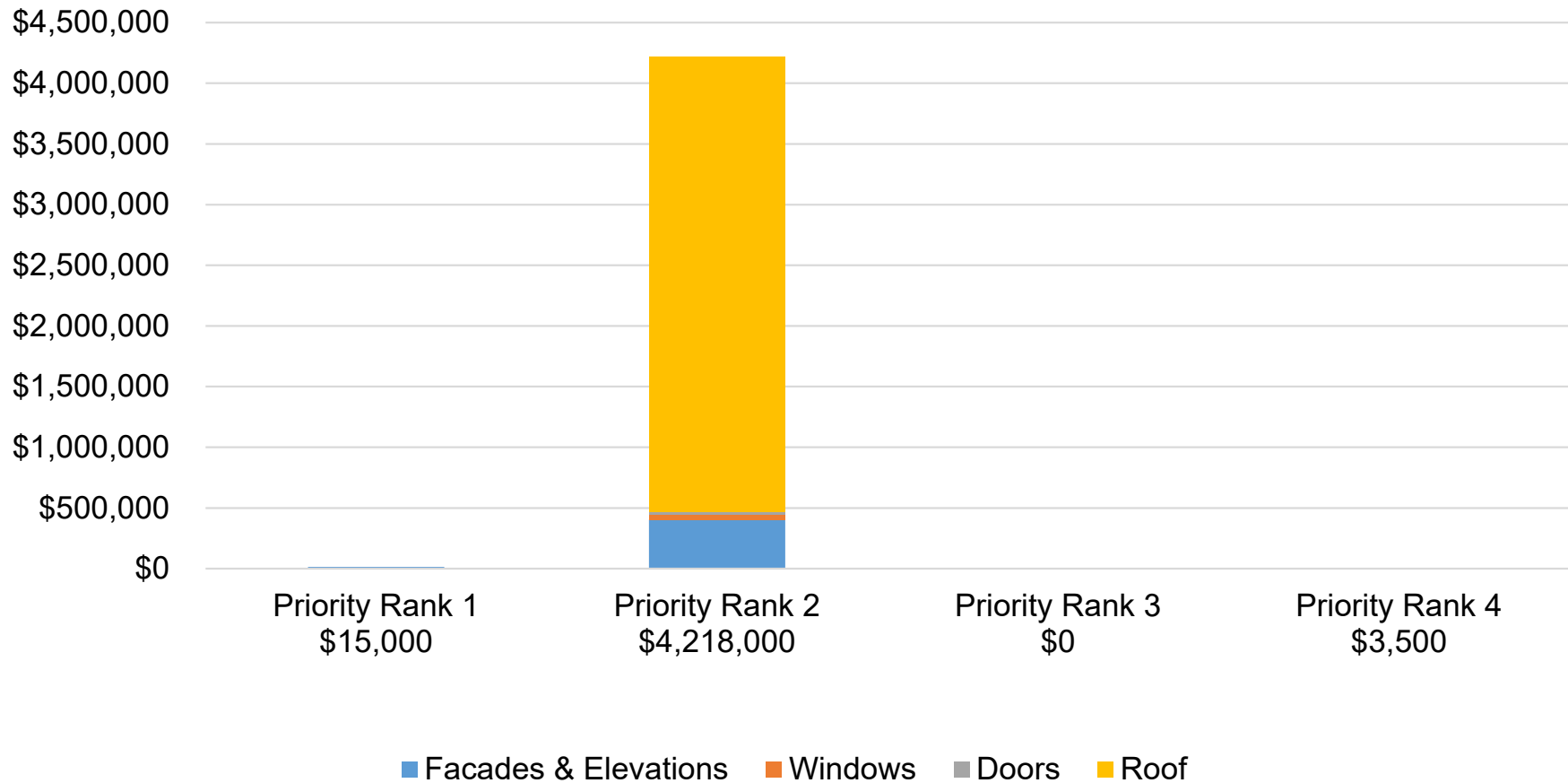
- Roof Improvements Estimates: \$3,750,000



- Replace EPDM roof and associated details: \$3,750,000



Bedford Middle School Improvements By Priority Rank



Greens Farms Elementary School: 95,000 SF

- Facades Improvements Estimates: \$128,500
- Window Improvements Estimates: \$35,000
- Door Improvements Estimates: \$25,000
- Roof Improvements Estimates: \$7,500
- Total with 15% contingency: \$ 213,900 = \$2.25/SF



Greens Farms Elementary School: Facades Improvements

- Facades Improvements Estimates: \$128,500



- Repair sills & other precast pieces: \$80,000
- Repoint bricks: \$12,000
- Sand, prime & paint lintels/replace delaminated lintels: \$25,000
- Remove efflorescence & ivy: \$8,000
- Sand, prime & paint rusted handrail bases: \$3,500

Greens Farms Elementary School: Window Improvements

- Window Improvements Estimates: \$35,000



- Lintel maintenance/replacement & precast repair included in facades improvements
- Recaulk windows as needed to create weathertight envelope

Greens Farms Elementary School: Door Improvements

- Door Improvements Estimates: \$25,000



- Sand, prime & paint rusted doors & frames: \$10,000
- Install new gaskets & weatherstripping: \$15,000

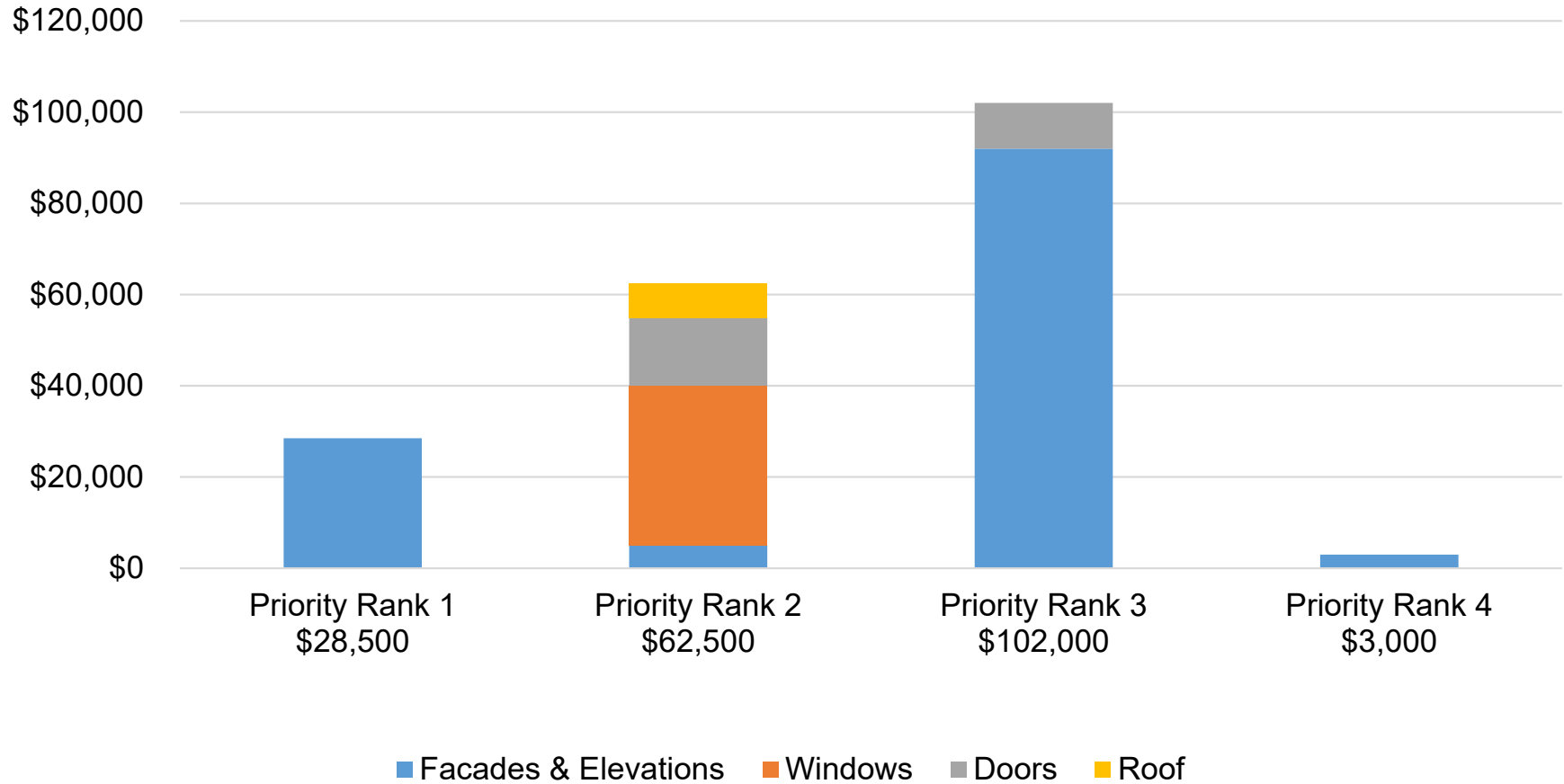
Greens Farms Elementary School: Roof Improvements

- Roof Estimates: \$7,500



- Regular maintenance required: \$7,500

Greens Farms School Improvements By Priority Rank



Kings Highway Elementary School: 74,000 SF

- Facades Improvements Estimates: \$53,000
- Window Improvements Estimates: \$35,000
- Door Improvements Estimates: \$14,000
- Roof Improvements Estimates: \$828,000
- Total with 15% contingency: \$1,069,500 = \$14.45/SF



Kings Highway Elementary School: Site Improvements

- Facades Improvements Estimates: \$43,000



- Repoint brick: \$10,000
- Recaulk joints: \$5,000
- Sand, prime & paint lintels/replace delaminated lintels: \$28,000
- Remove ivy, wash masonry: \$5,000
- Sand, prime & paint rusted handrail bases: \$3,500
- Repair cracked EIFS: \$1,500

Kings Highway Elementary School: Window Improvements

- Window Improvements Estimates: \$35,000



- Lintel repairs included in facades improvements
- Recaulk windows as needed to create weathertight envelope



Kings Highway Elementary School: Door Improvements

- Door Improvements Estimates: \$14,000



- Sand, prime & paint rusted doors & frames, replace as needed: \$8,000
- Install new gaskets & weatherstripping: \$6,000

Kings Highway Elementary School: Roof Improvements

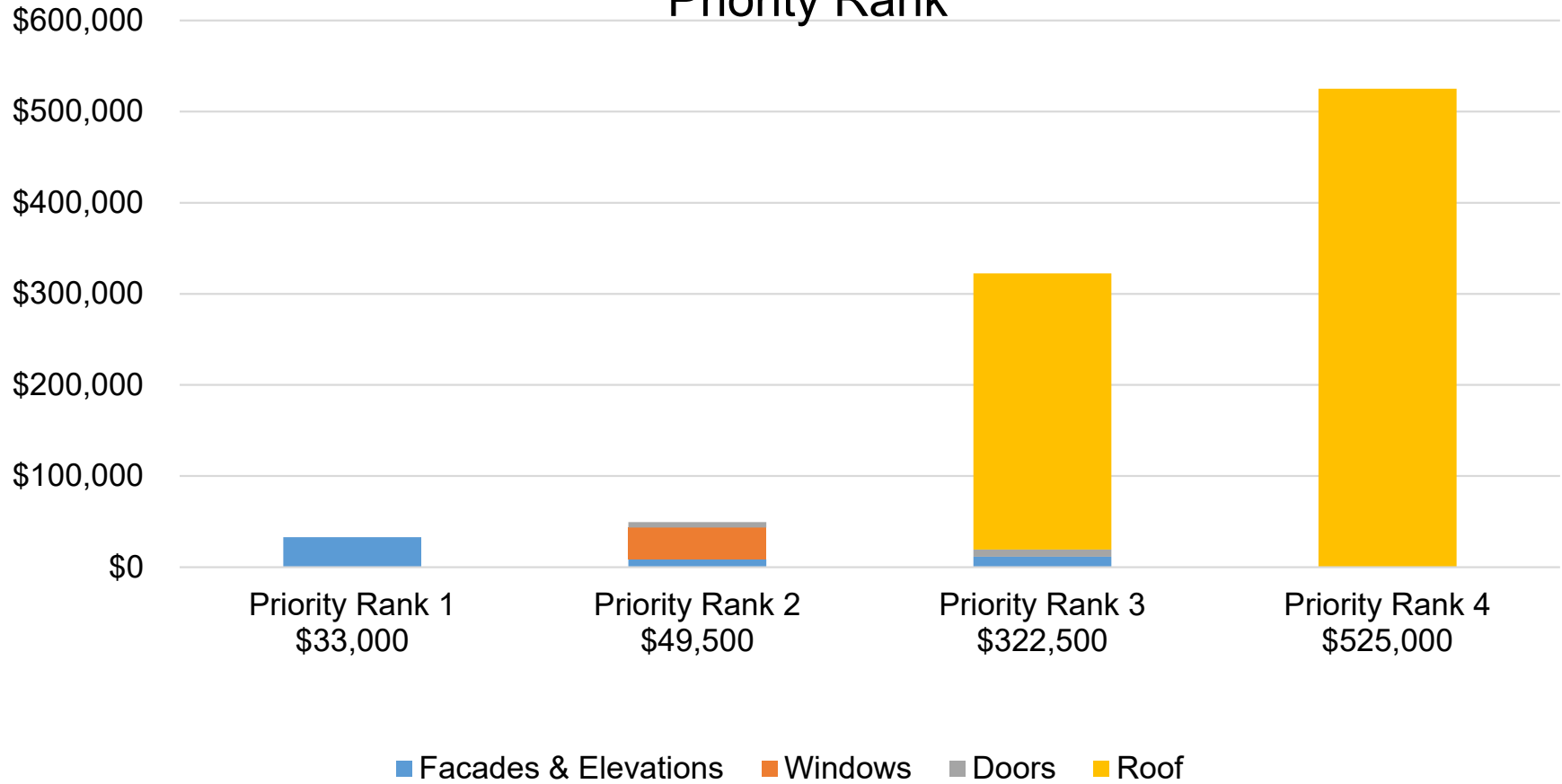
- Roof Improvements Estimates: \$828,000



- Clean/replace stained shingles: \$2,000
- Clean lichen off flat roof: \$1,000
- Replaces shingles within 3-5 years: \$300,000
- Replace flat roof within 5-10 years: \$525,000



Kings Highway Elementary School Improvements By Priority Rank



Saugatuck Elementary School: 91,000 SF

- Facades Improvements Estimates: \$109,500
- Window Improvements Estimates: \$12,500
- Door Improvements Estimates: \$49,500
- Roof Improvements Estimates: \$405,000
- Total with 15% contingency: \$662,975 = \$7.29/SF



Saugatuck Elementary School: Facades Improvements

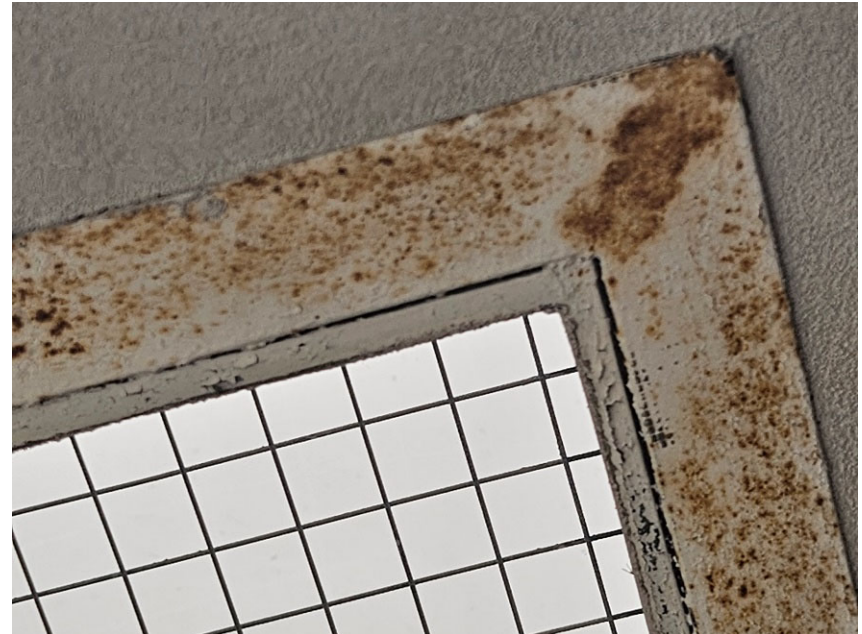
- Facades Improvements Estimates: \$109,500



- Repoint bricks: \$50,000
- Repair spalling brick: \$15,000
- Repair EIFS: \$2,500
- Patch cracked concrete with mortar: \$10,000
- Sand, prime & paint lintels/replace delaminated lintels: \$25,000
- Remove efflorescence with acid wash: \$3,000
- Sand prime & paint pergola roof columns with zinc-rich paint: \$2,000
- Cut back ivy & wash masonry: \$2,000

Saugatuck Elementary School: Window Improvements

- Window Improvements Estimates: \$12,500



- Sand, prime & paint wood trim: \$7,500
- Sand, prime & paint rusted skylights: \$5,000

Saugatuck Elementary School: Door Improvements

- Door Improvements Estimates: \$47,000



- Sand, prime & paint rusted doors & frames, replace as needed: \$17,500
- Replace storefront system #2: \$32,000

Saugatuck Elementary School: Roof Improvements

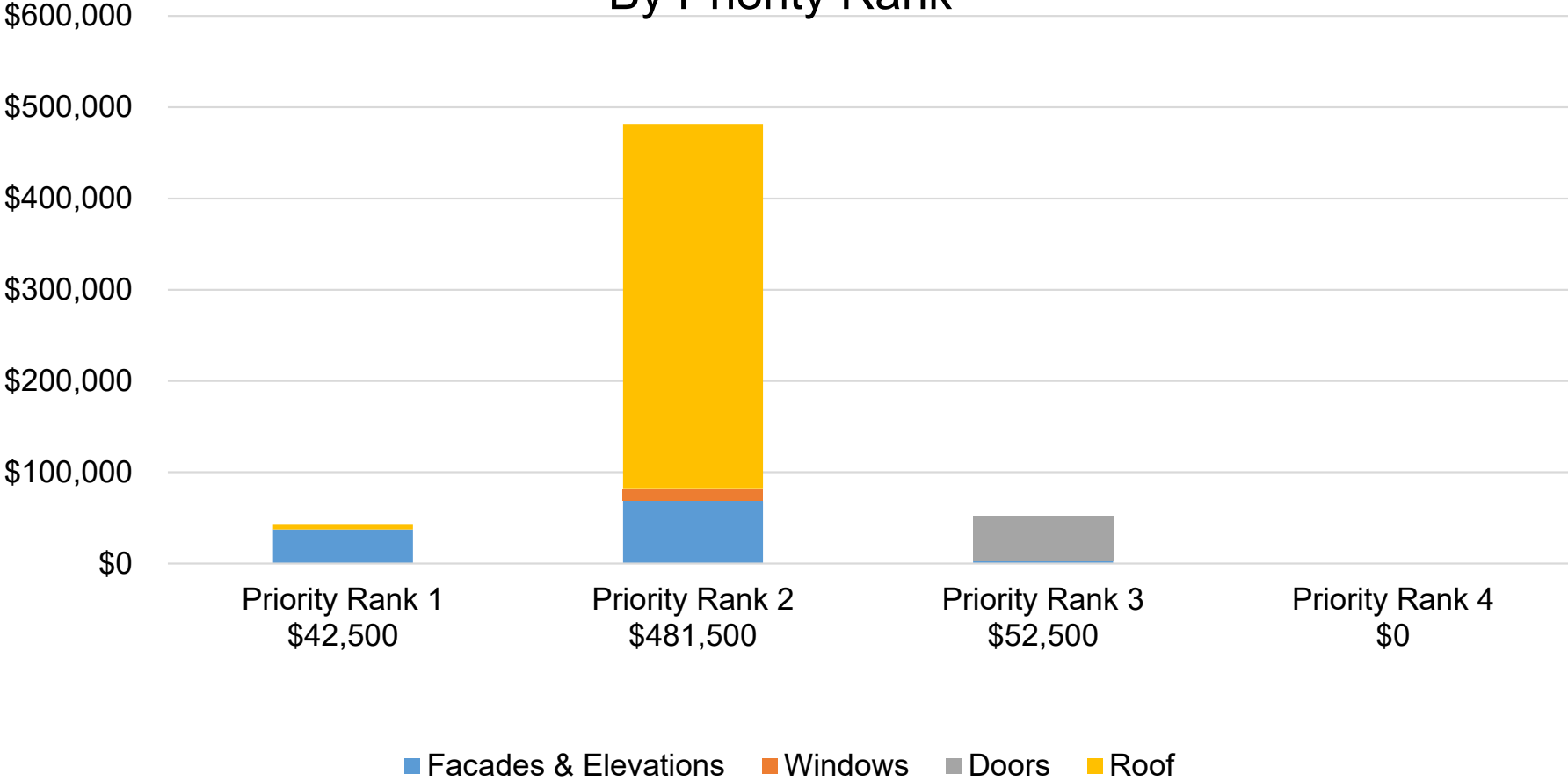
- Roof Improvements Estimates: \$405,000



- Repair & reflash around chimney: \$5,000
- Replace older roofs: \$400,000



Saugatuck Elementary School Improvements By Priority Rank



Staples High School: 460,000 SF

- Facades Improvements Estimates: \$130,000
- Window Improvements Estimates: \$388,000
- Door Improvements Estimates: \$5,500
- Roof Improvements Estimates: \$3,876,000
- Total with 15% contingency: \$5,059,425 = \$10.99/SF



Staples High School: Facades Improvements

- Facades Improvements Estimates: \$130,000



- Repoint brick: \$10,000
- Repair masonry cracks: \$2,500
- Remove & recaulk windows & doors: \$10,000
- Repair & reflash around window lintels: \$85,000
- Remove wasp nests: \$1,500
- Sand, prime & paint rusted lintels: \$6,000
- Remove mold on masonry with acid wash: \$3,000
- Replace old wood canopies: \$12,000
- Seal gaps between roofs & walls: N/A



Staples High School: Window Improvements

- Window Improvements Estimates: \$388,000



- Replace windows in older areas: \$375,000
- Replace cracked glazing in window: \$1,000
- Reinstall gaskets & caulk @ storefront systems: \$12,000



Staples High School: Door Improvements

- Window Improvements Estimates: \$5,500



- Sand, prime & paint jambs: \$2,500
- Recaulk as needed: \$3,000



Staples High School: Roof Improvements

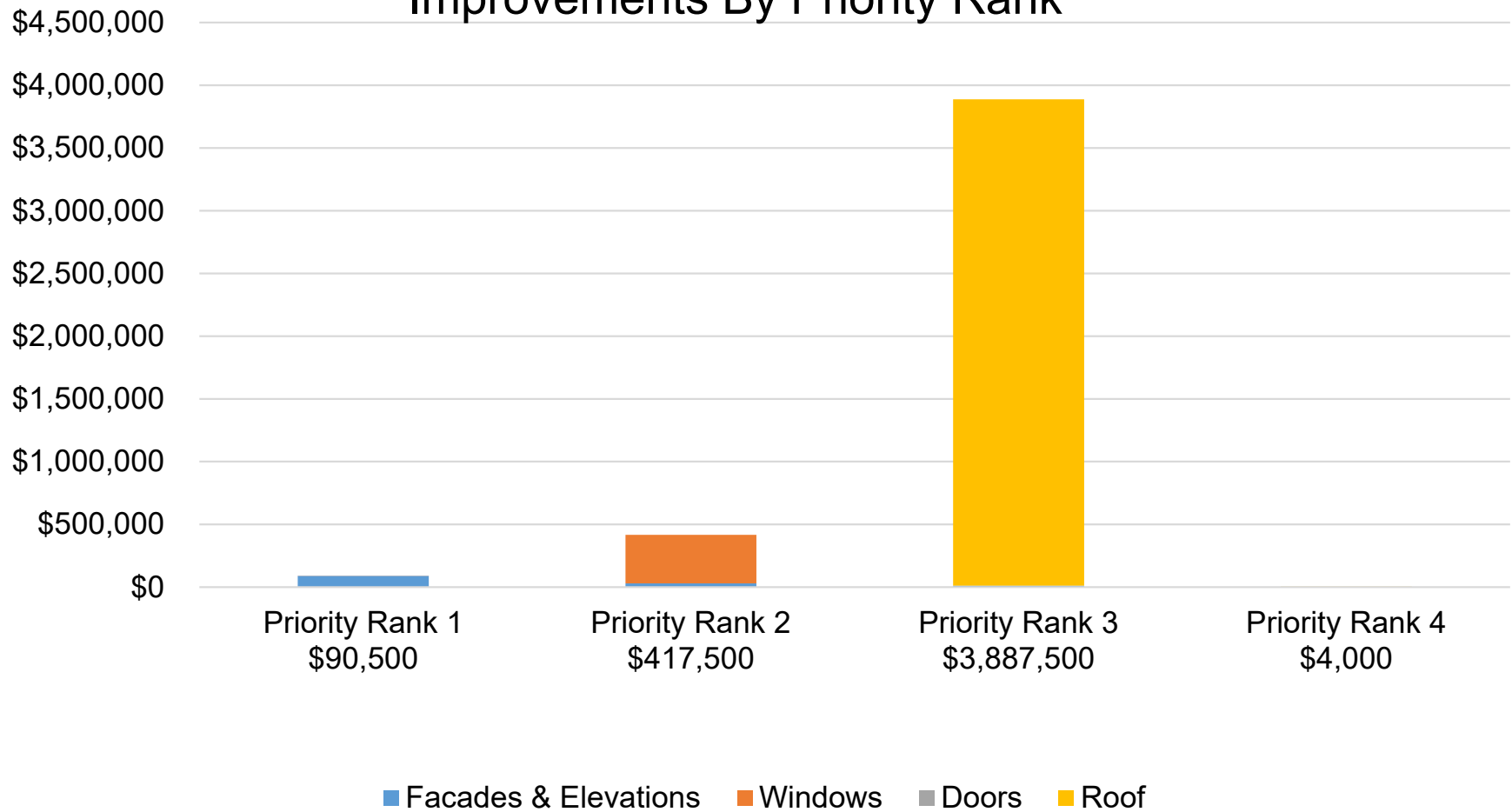
- Roof Improvements Estimates: \$3,876,000



- Replace roofs not replaced in 2023: \$3,875,000
- Sand, prime & paint clock tower service door: \$1,000



Staples High School Improvements By Priority Rank



**Thank you, questions,
discussion and next steps.**