

January 15, 2020





Overview of the Bond

2017 Work Completed

2018 Work Completed

2019 Work Completed

2020 Projected Work

2021 Projected Work

Financial Summary

Questions and Further Discussion



Overview of Bond



Why Now?

- Interest rates remain at historic lows, allowing \$134.5 million to be invested in our schools for about \$1/week/home
- To stay ahead of technology is essential for today's learning environment
- To maximize our operating budget for inclassroom learning
- To best preserve our community's investment in millions of square feet of space across 27 facilities that, on average, are 40+ years old

2016 SCHOOL BOND PROPOSAL







Creating Dynamic Futures

Proposal to preserve our schools and remain comparable and competitive as one of Michigan's leading school districts

- Provides Essentials for a 21st Century Learning Environment
- Addresses Safety & Security, Technology, and Facilities
- · Costs Approximately \$1 per Week for Most Homeowners

VOTE: Tuesday, May 3, 2016



Overview of Bond



Benefits of the Bond:

- Creates modern learning setting
- Provides school safety and security enhancements
- Reduces utility costs through environmentally smart upgrades
- Maintains strong schools, which is an investment in the community and home

Bonderations:

- Work to be performed from 2016-2021
- Bonds sold in three series: 2016, 2018, & 2019
- All educational facilities will see initial improvements in 2017, with incremental upgrades over remaining term
- Each educational building will receive annual technology upgrades during term

\$134.5 Million Bond Program Features: • Upgraded technology and infrastructure to support 21st century learning **Technology** · Enhanced technology in each classroom Mobile learning devices for students \$25.3 Million · Replacement of obsolete computers Updated and expanded wireless network · Secure entry vestibules · Security card reader systems for doors · Security cameras District-Wide · Roofing and flooring replacements · Upgraded fire alarm panels Facility. Safety, and Security · Replacement of interior and exterior doors Improvements/upgrades to HVAC, plumbing, and **Improvements** lighting/electrical systems S751 Million Renovations/improvements to restrooms. locker rooms, and cafeterias · Energy enhancements · LED exterior light upgrades · Re-pavement of deteriorating parking lots and Sites, Fields, sidewalks and Playground Replacement of worn fences **Improvements** Upgrades to athletic fields, courts, tracks, etc. S21.2 Million · Upgrades to playground areas Bus. Furniture. Replacement of worn, unusable classroom furniture and Equipment · Replacement of school buses past useful life Replacement · Necessary band, athletic, and recess equipment \$12.9 Million



Overview of Bond | Bond Team



Owner's Representative

Plante Moran Cresa

Architect/Engineer

Wakely Associates, Strategic Energy Solutions

Construction Manager

Clark Construction

Technology Designer

Integrated Design Solutions

Engineering

Spalding DeDecker, Testing Engineers and Consultants, **Kem-Tec**

Environmental Consultant

Nova Environmental





Elementary Schools

- Angus Elementary
- Black Elementary
- Cromie Elementary
- Green Acres Elementary
- Harwood Elementary
- Holden Elementary
- Jefferson Elementary
- Lean Elementary
- Siersma Elementary
- Susick Elementary
- Wilde Elementary
- Wilkerson Elementary
- Willow Woods Elementary

Middle Schools

- Beer Middle
- Carleton Middle
- Carter Middle
- Grissom Middle

High Schools

- Cousino High
- Warren Mott High
- Sterling Heights High

Other Buildings

- Administration Building
- Butcher
 Educational Center
- Career Prep Center
- Educational Service Center
- Flynn Education
 Center
- Hatherly
 Educational Center



2017 Work | Elementary Schools



Item	Description of Work Performed
Playgrounds	Replacement of underdrainage, wood fiber, and equipment and accessories
Ballfields	Replacement and upgrade of fencing, benches, and infield mix
Parking Lots	Repavement, additions, extensions, crack fill, seal coats, collars, restriping, and sidewalk replacement
School Signs	Installations and replacements
Stage Curtain	Replacement of stage curtains and rigging
Boiler	Replacement of boiler equipment
Exterior Lighting	Replacement of parking lot lights to LED, and replacement of exterior building lighting
Security	Replacement of secure entry equipment at selected areas, and replacement or installation of new security cameras
Network	Installation of IT cabling, wireless system upgrades, network switch gear, and universal power systems (UPS)
Phone	Installation of Voice Over Internet Protocol (VOIP) phone system with unified messaging



2017 Work | Middle Schools & Other Buildings



Item	Description of Work Performed
School Sign	Replacement of school sign with new LED digital sign
Kitchen	Addition of new ovens
Security	Installation of secure entry equipment at selected areas, and replacement or installation of new security cameras
Network	Installation of IT cabling, wireless system upgrades, network switch gear, and universal power system (UPS)
Phone	Installation of Voice Over Internet Protocol (VOIP) phone system with unified messaging



2017 Work | Cousino High School



Item	Description of Work Performed
Athletic Fields	Installation of new tennis courts, running track, turf field, and stadium sound system
Parking Lot	Repaving of rear drive lanes and parking lots on south and west sides of school, as well as isolated structure repairs, concrete collars, sidewalk repairs, restriping, etc., around the site (additional work to be completed in 2018)
Doors & Floors	Replacement of selective doors, frames, hardware, and selective floors
Kitchen	Upgrades to the kitchen, including a new dishwasher and floor tile in the serving line
Boiler	Replacement of boiler equipment
Exterior Lighting	Replacement of parking lot lights to LED, and replacement of building wall lights
Pool	Upgrades to filter room and pool grouting
Flooring	Replacement of media center and band room flooring
Selective Demolition	Demolition of old portable classrooms
Security	Replacement and installation of new security cameras, including those at the stadium
Network	Installation of IT cabling, wireless system upgrades, network switch gear, universal power system (UPS), and stadium wireless
Phone	Installation of Voice Over Internet Protocol (VOIP) phone system with unified messaging
Computers & Laptops	Purchasing of new desktop and laptop computers



2017 Work | Warren Mott High School



Item	Description of Work Performed
Athletic Fields	Installation of new tennis courts, running track, turf field, and stadium sound system
Parking Lot	Repaving of rear drive lanes and parking lots on south and west sides of the school, isolated structure repairs, concrete collars, sidewalk repairs, restriping, etc., around the site (additional work completed in 2018)
Doors & Floors	Replacement of selective doors, frames, hardware, and selective floors
Kitchen	Upgrades to kitchen, including a new dishwasher and floor tile in the serving line
Exterior Lighting	Replacement of parking lot lights to LED, and replacement of building wall lights
Pool	Upgrades to filter room and pool grouting
Security	Replacement and installation of new security cameras, including those at the stadium
Network	Installation of IT cabling, wireless system upgrades, network switch gear, universal power system (UPS), and stadium wireless
Phone	Installation of Voice Over Internet Protocol (VOIP) phone system with unified messaging



2017 Work | Sterling Heights High School



Item	Description of Work Performed
Athletic Fields	Installation of new tennis courts, running track, turf field, and stadium sound system
Performing Arts Center	Installation of new stage curtains, renovation of lighting system, and renovation of audio visual systems
Doors & Floors	Replacement of selective doors, frames, hardware, and floors
Exterior Lighting	Replacement of parking lot lights to LED, and replacement of building wall lights
Security	Replacement or installation of new security cameras, including those at the stadium
Network	Installation of IT cabling, wireless system upgrades, network switch gear, universal power system (UPS), and stadium wireless
Phone	Installation of Voice Over Internet Protocol (VOIP) phone system with unified messaging





Elementary Schools

- Angus Elementary
- Harwood Elementary
- Holden Elementary
- Jefferson Elementary
- Willow Woods Elementary
- Wilkerson Elementary

Middle Schools

- Beer Middle
- Carleton Middle
- Carter Middle
- Grissom Middle

High Schools

- Cousino High
- Warren Mott High
- Sterling Heights High

Other Buildings

- Educational Service Center
- Hatherly Educational Center



2018 Work | Elementary Schools



Item	Description of Work Performed
Building Exterior	 Replace service doors and hardware Upgrade exterior door hardware Upgrade fascia Repair masonry
Building Interior	 Replace doors and hardware and re-key all doors Replace sinks, toilets, urinals, flooring, and faucets in the restrooms Update building signage Replace flooring in the media center, office, and stage Replace existing operable partitions with drywall partitions
Classrooms	 Replace classroom casework Upgrade window treatments Replace classroom flooring with Luxury Vinyl Tile
Plumbing	 Replace drinking fountains, and add water bottle filling station Replace classroom sinks
Electrical Systems	 Install power outlets and raceways for technology Upgrade existing fire alarm system operating software Upgrade lighting, interior emergency egress, and exit lighting
Technology	 Upgrade classroom instructional technology Replace computers Upgrade A/V systems



plante moran | cresa

2018 Work | Middle Schools



Item	Description of Work Performed	
Site Work	 Modify parking to improve traffic flow Replace concrete approaches, sidewalks, steps, and stoops Improve site drainage 	Install concrete collars around catch basinsUpgrade parking lot lighting
Building Exterior	Replace service doors and hardwareUpgrade exterior door hardware	Replace overhead doors
Building Interior	 Replace select doors and hardware, and rekey all doors Replace sinks, toilets, urinals, flooring, faucets, and toilet partitions in restrooms Update building signage Replace flooring in media center, office, band, and computer rooms 	 Renovate home economics room and shop area Replace art room casework Upgrade window treatments Refinish gym floor Replace stage curtains
Plumbing & HVAC	 Replace drinking fountains, and add water bottle filling station 	Replace boiler, pipes, and valvesUpgrade temperature controls system
Electrical Systems	 Install power outlets and raceways for technology Upgrade existing fire alarm system operating software 	 Upgrade lighting, emergency egress, exit lighting, and occupancy sensors
Technology	Upgrade classroom instructional technologyReplace computers	Upgrade A/V systems
plante moran	cresa	*Some buildings vary slightly 1



2018 Work | Cousino High School



Item	Description of Work Performed
Site Work	 Replace asphalt in north parking lot Replace visitor lot and front lane asphalt paving Modify parking to improve traffic flow Replace concrete approach Crack fill and seal coat existing parking lots
Building Interior	Refinish gym floor
Technology	 Upgrade classroom instructional technology Replace computers Upgrade A/V systems



2018 Work | Warren Mott High School



Item	Description of Work Performed
Site Work	Upgrade athletic field entrance
Building Interior	Refinish gym floor
Electrical Systems	 Install power outlets and raceways for technology Upgrade existing fire alarm system operating software Upgrade lighting, interior emergency egress, and exit lighting
Technology	 Upgrade classroom instructional technology Replace computers Upgrade A/V systems



2018 Work | Sterling Heights High School



Item	Description of Work Performed
Site Work	 Replace parking lot drives Modify parking to improve traffic flow Replace concrete approach, sidewalks, steps, and stoops Install concrete collars around catch basins Improve site drainage
Building Exterior	 Replace service doors and hardware Upgrade exterior door hardware and re-key Replace overhead doors
Building Interior	 Replace select doors and hardware Replace flooring in media center Refinish gym floor
Plumbing & HVAC Systems	 Upgrade pool filtration system Replace boiler, pipes, and valves Upgrade temperature controls Replace secondary boiler (pool/hot water)
Electrical Systems	Upgrade electrical panels (boiler room/elevator)Install occupancy sensors
Technology	 Upgrade classroom instructional technology Replace computers Upgrade A/V systems



2018 Work | Educational Service Center



Item	Description of Work Performed
Site Work	 Replace east, north, and south parking lots Replace service drive out to Mound Road Replace concrete approach, sidewalks, steps, and stoops Install concrete collars around catch basins Replace concrete pad for dumpster Improve site drainage and storm sewer system Replace fence and bollards Upgrade parking lot lighting Replace fuel island Install canopy for fuel island
Technology	Replace computersInstall additional security cameras





Elementary Schools

- Black Elementary
- Cromie Elementary
- Jefferson Elementary
- Siersma Elementary
- Susick Elementary
- Wilde Elementary

High Schools

- Cousino High
- Warren Mott High
- Sterling Heights High

Other Buildings

- Career Prep Center
- Educational Service
 Center
- ACM Door & Hardware Replacement
- Public AddressSystem Upgrades



2019 Work | Elementary Schools



Item	Description of Work to Be Performed
Sitework	 Replace concrete approaches, sidewalks, steps and stoops Replace concrete collars around catch basins
Building Exterior	Replace service doors and hardwareUpgrade exterior door hardware
Building Interior	 Replace door hardware Replace sinks, toilets, urinals, flooring, and faucets in the restrooms Update building signage Replace flooring in the corridor, media center, office, and stage Replace existing operable partitions with drywall partitions Replace gym flooring
Classrooms	 Replace classroom flooring with Luxury Vinyl Tile Replace classroom casework Upgrade window treatments
Plumbing	 Replace drinking fountains and add water bottle filling station Replace classroom sinks Replace boiler, pipes, and valves
Electrical Systems	 Install power outlets and raceways for technology Upgrade existing fire alarm system operating software Upgrade lighting, interior emergency egress, and exit lighting
Technology	 Upgrade classroom instructional technology Replace computers Upgrade A/V systems



2019 Work | Cousino and Mott High Schools



Item	Description of Work to Be Performed
Building Exterior	Upgrade exterior masonry
Building Interior	 Replace sinks, toilets, urinals, flooring, partitions, and faucets in the restrooms Replace flooring in art rooms and offices Refinish auxiliary gym floor (Mott) Replace gym wall pads, bleachers, and wrestling mats Replace gym lockers Replace athletic lockers Replace gym equipment Replace stage curtain (Cousino) Replace window treatments Replace art room casework Replace eyewash and emergency shower in science rooms Replace select doors and hardware Replace flooring on stage stairs/ramp
Plumbing & HVAC Systems	 Replace boiler glycol replacement Replace pool boiler and hot water heater (Cousino) Replace drinking fountains Replace shower towers in locker rooms Upgrade HVAC temperature controls (SHHS)
Electrical Systems	 Upgrade interior lighting Replace emergency and exit lighting Upgrade fire alarm panel Upgrades to football stadium lighting (including SHHS)



2019 Work | CPC



Item	Description of Work to Be Performed
Building Exterior	Replace service doors and hardwareUpgrade exterior door hardware
Site Work	Replace concrete approachesRemove kindergarten playground
Building Interior	 Replace select door hardware Replace sinks, toilets, urinals, flooring, faucets, and toilet partitions in restrooms Update building signage Replace flooring in the selected classrooms and office Upgrade window treatments
Plumbing & HVAC Systems	 Replace drinking fountains and add water bottle filling station Replace boiler, pipes, and valves Upgrade temperature controls system Replace roof top unit air handling equipment Replace French drain
Electrical Systems	 Upgrade lighting, emergency egress, exit lighting, and occupancy sensors Replace emergency and exit lighting Upgrade fire alarm panel
Technology	Upgrade classroom instructional technology



2019 Work | Service Center



Item	Description of Work to Be Performed
Building Exterior	 Upgrade of exterior masonry and metal panels Replace service doors and hardware
Building Interior	 Replace select doors and hardware Replace sinks, toilets, urinals, flooring, faucets, and toilet partitions in restrooms Update building signage Replace flooring in the corridors and office Upgrade window treatments Replace marker boards and tack boards
Plumbing & HVAC Systems	 Replace drinking fountains Replace kitchen air handling unit Upgrade temperature controls
Electrical Systems	 Upgrade interior lighting Replace emergency and exit lighting Upgrade fire alarm panel Install power outlets and raceways for technology





Elementary Schools

- Green Acres Elementary
- Lean Elementary
- Wilde Elementary

High Schools

- Cousino High
- Warren Mott High
- Sterling Heights High

Other Buildings/Projects

- Miscellaneous Roofing Projects
- Butcher Educational Center
- Purchase Buses
- Purchase Kitchen Equipment
- Pfromm Center
- Technology
 Enhancements



2020 Work | Preliminary Bond Schedule



Schedule for Summer 2020 Projects

Prepare Construction Documents Nov 2019

Bid Phase Dec 2019 – Jan 2020

Board Review & Award Feb - Mar 2020

Clark Construction – Contract Feb 2020

Amendment

Material Expediting Mar - June 2020

Abatement Jun – Jul 2020

Construction Jun - Sept 2020

Punch List / Closeout Sept – Nov 2020

Pfromm Work Apr – May 2020



2020 Work | Various



Item	Description of Work to Be Perfor	med (at buildings as applicable)
Building Exterior	 Replace service doors and hardware Upgrade exterior door hardware Upgrade fascia Roofing upgrades where needed 	 Repair masonry Remove and replace dead/overgrown bushes Pfromm Center work
Building Interior	 Replace doors and hardware Replace sinks, toilets, urinals, flooring, and faucets in the restrooms Update building signage Replace flooring in the media center, office, and stage 	 Replace existing operable partitions with permanent drywall partitions Replace classroom casework Upgrade window treatments Replace classroom flooring with luxury vinyl tile
Plumbing & HVAC Systems	 Replace drinking fountains, and add water bottle filling station 	Replace classroom sinksReplace hot water heater
Electrical Systems	 Install power outlets and raceways for technology Upgrade existing fire alarm system operating software 	 Upgrade lighting, interior emergency egress, and exit lighting
Technology	 Public address system upgrades – concurrently with 2019 renovation Installation of new interactive gym projection systems for K-5 Buildings 	 Upgrade classroom instructional technology Deployment of district-wide all digital radio communications system Cousino HS radio station upgrades



2021 Work – Final Phase of Bond Work



Buildings/Projects

- **Administration Building**
- **District Wide Landscaping**
- **District Wide Furniture, Fixtures & Equipment Purchases**
- **Purchase Buses**



2021 Work | Preliminary Bond Schedule



Schedule for Summer 2021 Projects

Schematic Design and Design Jan - Jun 2020

Development Phase

Construction Documents Aug 2020

Bid Phase Sep 2020

Board Award Oct 2020

Material Expediting Oct 2020 - Jan 2021

Construction Jan - Jul 2021

Punch List / Closeout Aug - Nov 2021

Furniture, Fixtures & Equipment TBD



2021 Work | Administration Building



Item	Description of Work to Be Performe	d
Sitework	 Replace concrete approaches, sidewalks, steps and stoops Replace asphalt paving 	 Modify parking and improve traffic flow Install concrete collars around catch basins
Building Exterior	Replace service doors and hardwareUpgrade exterior door hardwareReplace window systems	Repair masonryRoofing upgrades where needed
Building Interior	 Replace doors and hardware Replace sinks, toilets, urinals, flooring, and faucets in the restrooms Update building signage 	 Upgrade window treatments Replace flooring with luxury vinyl tile Upgrade Administration interiors
Plumbing & HVAC Systems	 Replace drinking fountains and add water bottle filling station 	Replace hot water heaterReplace existing HVAC systems
Electrical Systems	 Install power outlets and raceways for technology Upgrade existing fire alarm system operating software 	 Upgrade lighting, interior emergency egress, and exit lighting
District Wide Technology	Public address system upgradesInstructional devices	Headend room upgrades
District Wide Landscaping	 Remove and replace dead/overgrown bushes 	



Financial Summary



Total Sources Available (including bond issuance,	
interest, rebates)	138,550,836
Spend - through December 31, 2019	105,038,016
Spend - to complete 2019 work	5,598,207
Spend - 2020 work and 2021 work (estimate)	27,914,613
	138,550,836



Questions and Further Discussion