



plante moran | cresa

2016 Bond Project Update

January 20, 2021





Overview of the Bond

2017 Work Completed

2018 Work Completed

2019 Work Completed

2020 Work Completed

2021 Projected Work

Administration Facility Renovations

Print Shop Move

Sterling Heights High School – Entry Landscaping

Financial Summary


Questions and Discussion






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 in-classroom 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



Warren Consolidated Schools



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



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 values

Bond Considerations:

- 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:

Technology \$25.3 Million	<ul style="list-style-type: none"> • Upgraded technology and infrastructure to support 21st century learning • Enhanced technology in each classroom • Mobile learning devices for students • Replacement of obsolete computers • Updated and expanded wireless network
District-Wide Facility, Safety, and Security Improvements \$75.1 Million	<ul style="list-style-type: none"> • Secure entry vestibules • Security card reader systems for doors • Security cameras • Roofing and flooring replacements • Upgraded fire alarm panels • Replacement of interior and exterior doors • Improvements/upgrades to HVAC, plumbing, and lighting/electrical systems • Renovations/improvements to restrooms, locker rooms, and cafeterias • Energy enhancements • LED exterior light upgrades
Sites, Fields, and Playground Improvements \$21.2 Million	<ul style="list-style-type: none"> • Re-pavement of deteriorating parking lots and sidewalks • Replacement of worn fences • Upgrades to athletic fields, courts, tracks, etc. • Upgrades to playground areas
Bus, Furniture, and Equipment Replacement \$12.9 Million	<ul style="list-style-type: none"> • Replacement of worn, unusable classroom furniture • Replacement of school buses past useful life • Necessary band, athletic, and recess equipment



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
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



Item	Description of Work Performed
Building Exterior	<ul style="list-style-type: none">• Replace service doors and hardware• Upgrade exterior door hardware• Upgrade fascia• Repair masonry
Building Interior	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Replace classroom casework• Upgrade window treatments• Replace classroom flooring with Luxury Vinyl Tile
Plumbing	<ul style="list-style-type: none">• Replace drinking fountains, and add water bottle filling station• Replace classroom sinks
Electrical Systems	<ul style="list-style-type: none">• Install power outlets and raceways for technology• Upgrade existing fire alarm system operating software• Upgrade lighting, interior emergency egress, and exit lighting
Technology	<ul style="list-style-type: none">• Upgrade classroom instructional technology• Replace computers• Upgrade A/V systems



2018 Work | Middle Schools



Item	Description of Work Performed	
Site Work	<ul style="list-style-type: none"> • Modify parking to improve traffic flow • Replace concrete approaches, sidewalks, steps, and stoops • Improve site drainage 	<ul style="list-style-type: none"> • Install concrete collars around catch basins • Upgrade parking lot lighting
Building Exterior	<ul style="list-style-type: none"> • Replace service doors and hardware • Upgrade exterior door hardware 	<ul style="list-style-type: none"> • Replace overhead doors
Building Interior	<ul style="list-style-type: none"> • Replace select doors and hardware, and re-key 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 	<ul style="list-style-type: none"> • Renovate home economics room and shop area • Replace art room casework • Upgrade window treatments • Refinish gym floor • Replace stage curtains
Plumbing & HVAC	<ul style="list-style-type: none"> • Replace drinking fountains, and add water bottle filling station 	<ul style="list-style-type: none"> • Replace boiler, pipes, and valves • Upgrade temperature controls system
Electrical Systems	<ul style="list-style-type: none"> • Install power outlets and raceways for technology • Upgrade existing fire alarm system operating software 	<ul style="list-style-type: none"> • Upgrade lighting, emergency egress, exit lighting, and occupancy sensors
Technology	<ul style="list-style-type: none"> • Upgrade classroom instructional technology • Replace computers 	<ul style="list-style-type: none"> • Upgrade A/V systems



Item	Description of Work Performed
Site Work	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Refinish gym floor
Technology	<ul style="list-style-type: none">• Upgrade classroom instructional technology• Replace computers• Upgrade A/V systems



Item	Description of Work Performed
Site Work	<ul style="list-style-type: none">• Upgrade athletic field entrance
Building Interior	<ul style="list-style-type: none">• Refinish gym floor
Electrical Systems	<ul style="list-style-type: none">• Install power outlets and raceways for technology• Upgrade existing fire alarm system operating software• Upgrade lighting, interior emergency egress, and exit lighting
Technology	<ul style="list-style-type: none">• Upgrade classroom instructional technology• Replace computers• Upgrade A/V systems



Item	Description of Work Performed
Site Work	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Replace service doors and hardware• Upgrade exterior door hardware and re-key• Replace overhead doors
Building Interior	<ul style="list-style-type: none">• Replace select doors and hardware• Replace flooring in media center• Refinish gym floor
Plumbing & HVAC Systems	<ul style="list-style-type: none">• Upgrade pool filtration system• Replace boiler, pipes, and valves• Upgrade temperature controls• Replace secondary boiler (pool/hot water)
Electrical Systems	<ul style="list-style-type: none">• Upgrade electrical panels (boiler room/elevator)• Install occupancy sensors
Technology	<ul style="list-style-type: none">• Upgrade classroom instructional technology• Replace computers• Upgrade A/V systems



Item	Description of Work Performed
Site Work	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Replace computers• Install 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 Address System Upgrades



2019 Work | Elementary Schools



Item	Description of Work to Be Performed
Sitework	<ul style="list-style-type: none"> • Replace concrete approaches, sidewalks, steps and stoops • Replace concrete collars around catch basins
Building Exterior	<ul style="list-style-type: none"> • Replace service doors and hardware • Upgrade exterior door hardware
Building Interior	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Replace classroom flooring with Luxury Vinyl Tile • Replace classroom casework • Upgrade window treatments
Plumbing	<ul style="list-style-type: none"> • Replace drinking fountains and add water bottle filling station • Replace classroom sinks • Replace boiler, pipes, and valves
Electrical Systems	<ul style="list-style-type: none"> • Install power outlets and raceways for technology • Upgrade existing fire alarm system operating software • Upgrade lighting, interior emergency egress, and exit lighting
Technology	<ul style="list-style-type: none"> • Upgrade classroom instructional technology • Replace computers • Upgrade A/V systems



Item	Description of Work to Be Performed
Building Exterior	<ul style="list-style-type: none">• Upgrade exterior masonry
Building Interior	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Upgrade interior lighting• Replace emergency and exit lighting• Upgrade fire alarm panel• Upgrades to football stadium lighting (including SHHS)



Item	Description of Work to Be Performed
Building Exterior	<ul style="list-style-type: none">• Replace service doors and hardware• Upgrade exterior door hardware
Site Work	<ul style="list-style-type: none">• Replace concrete approaches• Remove kindergarten playground
Building Interior	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Upgrade lighting, emergency egress, exit lighting, and occupancy sensors• Replace emergency and exit lighting• Upgrade fire alarm panel
Technology	<ul style="list-style-type: none">• Upgrade classroom instructional technology



2019 Work | Service Center



Item	Description of Work to Be Performed
Building Exterior	<ul style="list-style-type: none">• Upgrade of exterior masonry and metal panels• Replace service doors and hardware
Building Interior	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Replace drinking fountains• Replace kitchen air handling unit• Upgrade temperature controls
Electrical Systems	<ul style="list-style-type: none">• 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 | Various



Item	Description of Work to Be Performed (at buildings as applicable)	
Building Exterior	<ul style="list-style-type: none"> • Replace service doors and hardware • Upgrade exterior door hardware • Upgrade fascia • Roofing upgrades where needed 	<ul style="list-style-type: none"> • Repair masonry • Remove and replace dead/overgrown bushes • Pfromm Center Demolition work
Building Interior	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Replace existing operable partitions with permanent drywall partitions • Replace classroom casework • Upgrade window treatments • Replace classroom flooring with luxury vinyl tile
Plumbing & HVAC Systems	<ul style="list-style-type: none"> • Replace drinking fountains, and add water bottle filling station 	<ul style="list-style-type: none"> • Replace classroom sinks • Replace hot water heater
Electrical Systems	<ul style="list-style-type: none"> • Install power outlets and raceways for technology • Upgrade existing fire alarm system operating software 	<ul style="list-style-type: none"> • Upgrade lighting, interior emergency egress, and exit lighting
Technology	<ul style="list-style-type: none"> • Public address system upgrades – concurrently with 2019 renovation • Installation of new interactive gym projection systems for K-5 Buildings 	<ul style="list-style-type: none"> • 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**
 - **Sterling Heights High School Entry Landscaping**
 - **Print Shop Move Project**
 - **Final Furniture, Fixtures and Equipment**
 - **Network Infrastructure Upgrades**

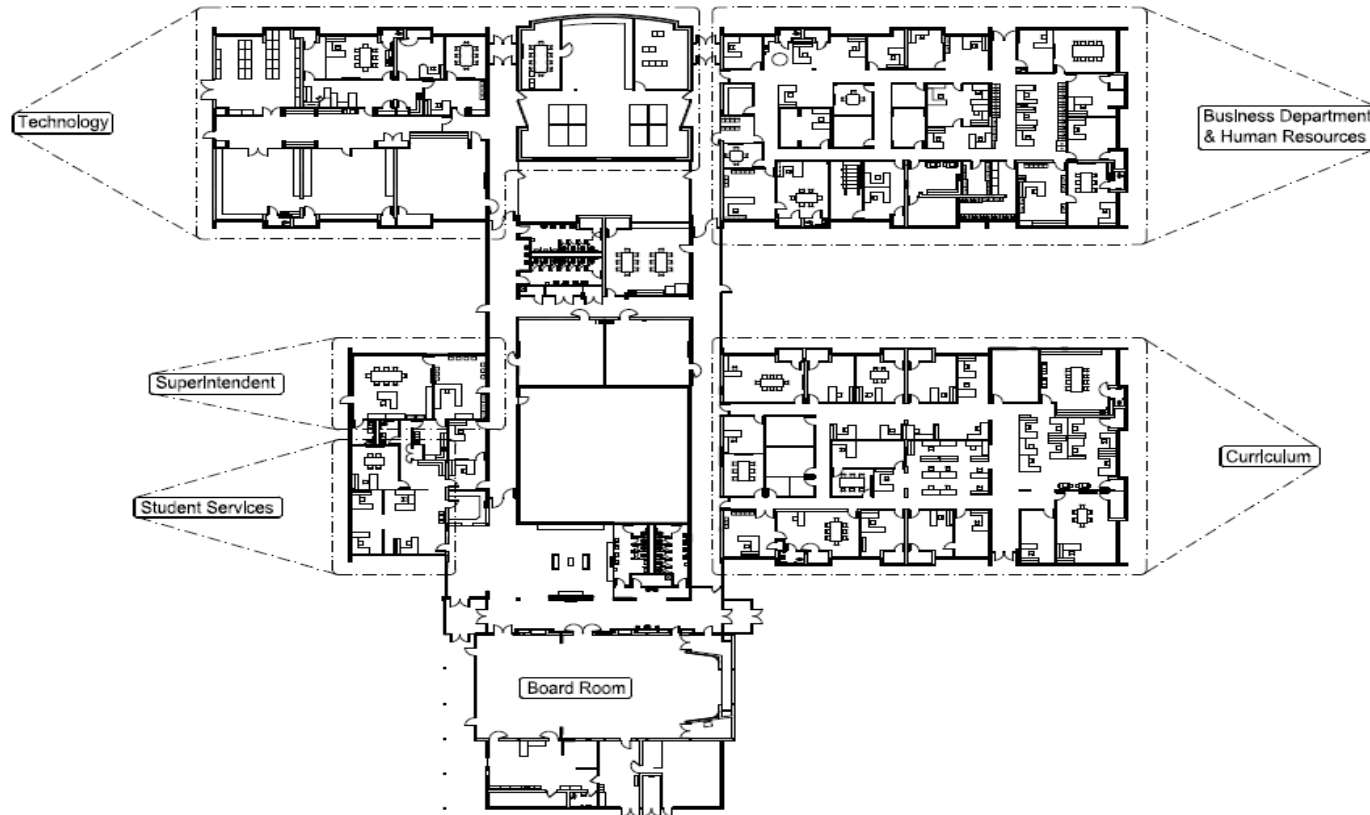


Schedule for Administration Building Project

Prepare Construction Documents	Aug 2020 – Feb 2021
Bid Phase	March 2021
Board Review & Award	April 2021
Clark Construction – Contract Amendment	April 2021
Material Expediting	Apr – June 2021
Abatement	Apr – May 2021
Construction	Jun – Oct 2021
Punch List / Closeout	November 2021



2021 Work - Administration Building – Layout



Administration Building Renovations

Warren Consolidated Schools



January 5, 2021



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2021 Work | Administration Building & Final Projects



Item	Description of Work to Be Performed	
Sitework	<ul style="list-style-type: none"> • Site storm water drainage • Parking Lot Improvements 	
Building Exterior	<ul style="list-style-type: none"> • Replace service doors and hardware • Upgrade exterior door hardware • Replace window systems 	<ul style="list-style-type: none"> • Repair masonry
Building Interior	<ul style="list-style-type: none"> • Replace doors and hardware • Replace sinks, toilets, urinals, flooring, and faucets in the restrooms • Update building signage 	<ul style="list-style-type: none"> • Upgrade window treatments • Replace flooring with luxury vinyl tile • Upgrade Administration interiors
Plumbing & HVAC Systems	<ul style="list-style-type: none"> • Replace drinking fountains and add water bottle filling station 	<ul style="list-style-type: none"> • Replace hot water heater • Replace existing HVAC systems
Electrical Systems	<ul style="list-style-type: none"> • Install power outlets and raceways for technology • Upgrade existing fire alarm system operating software 	<ul style="list-style-type: none"> • Upgrade lighting, interior emergency egress, and exit lighting
Technology	<ul style="list-style-type: none"> • Public address system upgrades • Head-end room upgrades • Wireless network upgrades 	<ul style="list-style-type: none"> • Audio/Visual upgrades • Structured cabling upgrades • Security upgrades (Cameras and card access)
Sterling Heights High School Landscaping	<ul style="list-style-type: none"> • Remove/replace dead/overgrown bushes • Remove/replace the old landscape timbers 	



Schedule for Administration Temporary Move

OCI Staff Move to Fillmore	October 2020
Administration Staff move to Angus	December 2020
Construction on Administration Building	May 2021 – Oct 2021
Punchlist Administration Building	November 2021
OCI/Administration Staff Move to Administration Building	December 2021
Administration Building fully operational	January 3, 2022



Financial Summary



Total Sources Available (including bond issuance, interest, rebates)	138,550,835
Spend - through November 30, 2020	124,223,958
Spend - to complete 2020 work	7,608,983
Spend - 2021 work (estimate) ^	6,717,894
	138,550,835

^Any costs to complete bond projects above final available funds will be funded through the Capital Projects Fund.



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Questions and Discussions