EDGEWOOD-COLESBURG
COMMUNITY SCHOOL DISTRICT

2016

MASTER PLAN

Executive Summary

CREATING
SPACES
THAT
CHANGE
LIVES

STRUXTURE

ARCHITECTURE ▫ MASTER PLANNING ▫ INTERIOR DESIGN

TABLE OF CONTENTS

RESEARCH & DISCOVERY

1.1 OVERVIEW

A Master Plan is a comprehensive document that sets out an overall facility strategy for an organization. Starting in April of 2016, StruXture Architects began working with the Edgewood-Colesburg Community School District to develop a long-range master facilities plan. Team members from StruXture Architects toured and examined the buildings for various elements of building design, architecture, code compliance and accessibility. Consultants from KCL Engineering examined the buildings for mechanical, electrical, and plumbing adequacies. We use our knowledge and experience of design and construction, as well as visual observations, to generate the narratives and cost estimates contained in this report.

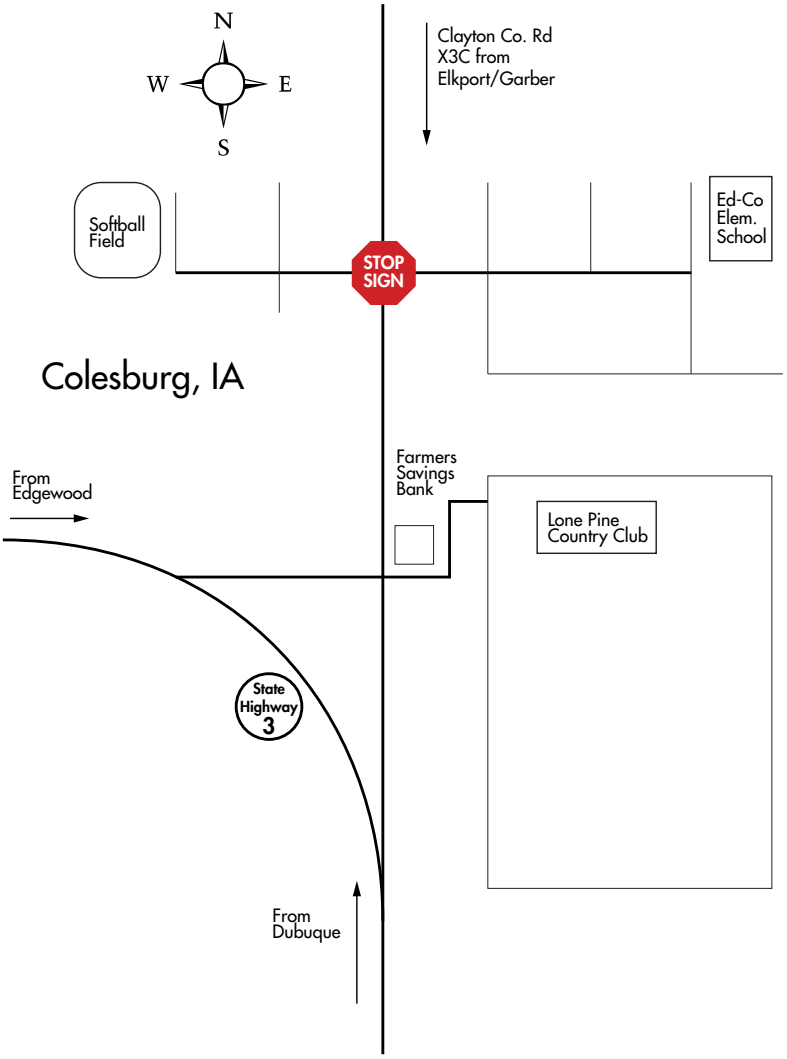
The facilities were evaluated based on prior and current building codes and the Americans with Disabilities Act; some were required and some were recommended to determine the scope of the work. Items identified as non-compliant with code are in reference to 2015 International Building Codes. These items may have been compliant with codes at the time of construction, but not in compliance with current codes. This does not mean the school district is in violation of the building code. The level of safety and awareness has generally increased with time; therefore, current codes are a good basis for reviewing the safety and soundness of a school building.

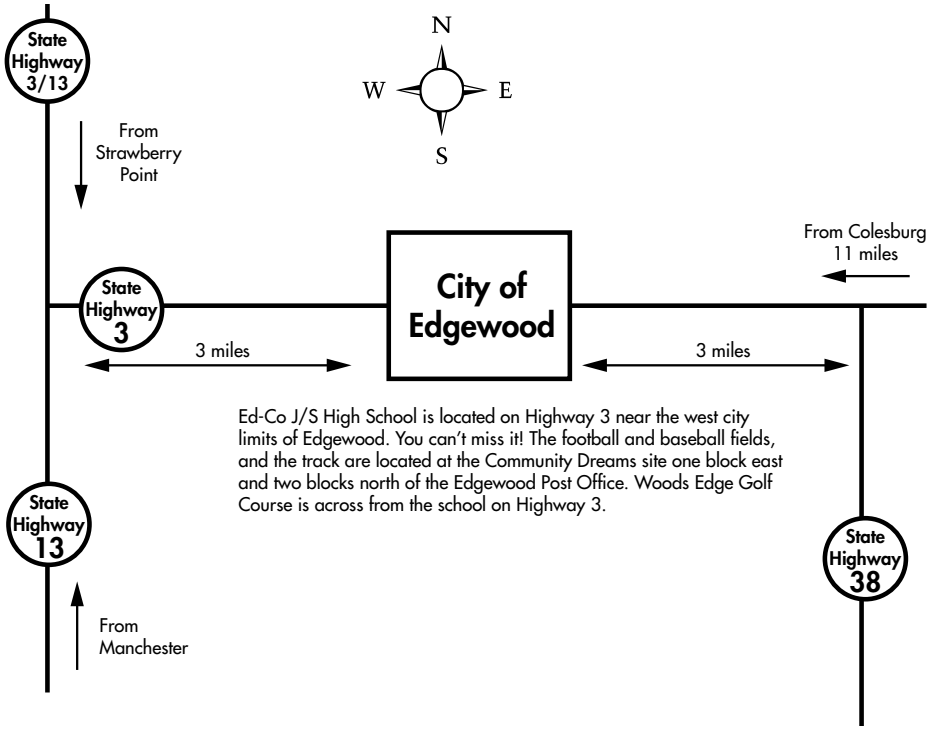
In addition to assessing the buildings for soundness, the facilities were analyzed from a programming standpoint and space utilization was reviewed. The facilities were benchmarked against an Ideal Space Program for school buildings of like nature. These space programs represent those components commonly found and those desired in order to deliver current educational curriculum, support 21st Century Learning, and enhance student engagement. Data supplied by the school district was also collected and studied, as well as visual inspections of the spaces for utilization. A series of meetings were held including StruXture staff and school administration to discuss the facilities, space planning and utilization. StruXture used this information to assess space use and availability in order to determine and recommend facility consideration. These results are reflected in the Programming section of the report. This report represents the information gathered and collected during this process.

Information Assembled:

In order to understand the Edgewood-Colesburg Community School District and their facilities, StruXture Architects worked with the staff and various sources to research and gather information. The following information was obtained:

- Site plans of each school site
- Existing district school boundaries
- Existing floor plans of each site
- Enrollment history and projections
- List of proposed projects to be completed as funds become available
- History and data for each community





Ed-Co J/S High School is located on Highway 3 near the west city limits of Edgewood. You can't miss it! The football and baseball fields, and the track are located at the Community Dreams site one block east and two blocks north of the Edgewood Post Office. Woods Edge Golf Course is across from the school on Highway 3.

1.2 DISTRICT OVERVIEW

The Edgewood-Colesburg Community School District supports parents, students and the communities as they work toward the ultimate mission to assist and ensure that each student achieves his or her level of educational excellence.

The Board of Directors of the Edgewood-Colesburg Community School District is committed to a philosophy of service to children; the objective of this philosophy is to help each child develop into a mature individual and a contributing member of society. The Board believes that this objective can best be met through a school program wide enough in scope to encompass the intellectual, physical, civic, social, and aesthetic education of children.

The Board of Directors realizes that an effective public school program must be directed toward common needs of all children; however, the Board believes the emphasis must lie always on the unique needs of each individual child.

The Board of Directors recognizes that the guardianship of public education is a trust and an obligation – that the goals of education and the goals of democracy are fundamentally the same. For that reason, the Board considers that its philosophy and objectives can best be realized when the educational program is directed through written Board policies, policies that are based on the Constitution, the state statutes, federal and state regulations, and the specific needs of this school district.

The communities of Edgewood and Colesburg are located 11 miles apart on Iowa State Highway 3, in Northeast Iowa. The Edgewood-Colesburg District Office, Bus Garage, and Junior/Senior High School campus are located in Edgewood, Iowa. The Elementary School is located in Colesburg, IA.

1.2 ENROLLMENT

Five Year Certified Enrollment History:

2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
461.1	430.1	414	409	400

Five Year Certified Enrollment Projections:

2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
370.8	346	357	344.3	332.1

1.3 DISTRICT OVERVIEW OF FACILITIES

The original High School building was constructed in 1975 with additions in 1990, 2001 and 2003. The total square footage is approximately 65,940 sq. ft. In addition to the main high school building, the site also contains the district offices which are attached to the high school. Due to the original building being a 2-story structure, subsequent additions created some accessibility issues with different levels in the building. The High School building is constructed of masonry walls with steel roof structure. Some portions have a low slope membrane roof, while other areas have sloping metal roofs. The building has been well maintained over the years and is in overall good physical condition. The shop program is housed in a separate building on the site and there is also a separate bus building on site. The shop building is constructed out of a steel framing and metal cladding, while the bus building has concrete block walls and a metal roof. The shop building is approximately 7,260 sq. ft. and the bus building is approximately 2,750 sq. ft. There are approximately 70 total parking spaces around the school including lots and off street parking.

The original Elementary School building was built in 1952 with additions in 1975 and 1990. The total square footage is approximately 59,600 sq. ft. and it sits on approximately 5.45 acres. The school district also owns approximately 2.34 acres to the northwest of the property. There are approximately 60 total parking spaces around the school. The majority of the building is constructed of masonry walls with wood framed roof structure and a standing seam metal roof, while the kitchen area has a low slope membrane roof. Since the building has been constructed with a number of additions to the original 2-story building there are differing levels in that original portion, and accessibility is addressed with a series of ramps. The building has been well maintained over the years and is in overall good condition.

1.4 CORE TEAM

Edgewood-Colesburg Representatives:

Rob Busch, Superintendent

Dawn Voss, JR/SR High Principal

Jason Jones, School Board President

Kenneth Faust, School Board Vice-President

Travis Gudenkauf, School Board Member

Robert Schilling, School Board Member

Doug Moser, School Board Member

Design Team:

Pam Johnson, StruXture Architects, Architect

Jane Miller, StruXture Architects, Principal/Interior Designer

James Deeds, KCL Engineering, Managing Principal/Senior Electrical Engineer

Mike Salmon, KCL Engineering, Senior Mechanical Engineer

1.5 PROJECT GOALS

The project goals had been previously determined by the Edgewood-Colesburg Community School District as follows:

- Develop a long-range master facilities plan.
- Assess the physical conditions of all sites and determine the needs for repair and replacement.
- Determine the cost of physical condition improvements on sites.
- Review facilities utilization and projected growth.
- Assess the efficiency of the facilities and space uses.
- Assess adequacy and function of sites and identify shortfalls for the future.
- Facilitate focus group meetings.
- Provide solution and budget.

FACILITIES ASSESSMENT

2.1 OVERVIEW

The facility assessment is composed of several categories. These categories include the actual physical assessment of the buildings, educational adequacy of the spaces, and finally costs associated with updating the facilities to comply with minimum code requirements. Items reviewed for the building assessment include exterior and interior conditions, site conditions, mechanical, plumbing and electrical conditions. Educational adequacy reviews how the spaces are equipped with technology, collaborative furnishings, casework and storage, and the relationship to other spaces. Costs are generated to address code required items such as fire rated doors and walls, accessible hardware, and egress issues. Accessible spaces are also estimated such as restroom renovations if needed. These costs do not necessarily reflect recommended replacements of cosmetic items such as floor coverings, windows, etc.

2.2 FACILITY & EDUCATIONAL ADEQUACY ASSESSMENT

The buildings were reviewed and assessed on the following criteria:

Exterior Condition

- Cladding materials
- Window condition
- Site/paving condition
- Roof condition
- Water drainage/collection
- Site access and accessibility

Interior Condition

- Interior accessibility including hardware, restrooms, door sizes, etc
- Flooring condition
- Wall condition including ratings as needed
- Door and hardware condition including ratings as needed
- Ceiling condition
- Casework and storage
- Technology and collaboration

Mechanical and Plumbing Condition

- Age of equipment
- Fresh air adequacy
- Age of plumbing fixtures
- Water heating condition
- Accessibility of plumbing fixtures

Electrical and Data/Network

- Panel condition
- Power adequacy
- Data adequacy
- Device condition

Educational adequacy assessments

- The Spaces were reviewed with the following criteria:
- Space function
- Collaboration
- Storage and casework
- Technology

2.2.1 EDGEWOOD-COLESBURG JR/SR HIGH SCHOOL

EXTERIOR

The original section of the building is a two-story structure constructed of masonry bearing walls with brick cladding. This portion of the building was found to be in average condition for its age with minor masonry repairs needed at various locations due to damage and deterioration. The addition to the north and east is single story. It is constructed out of masonry cavity walls with brick exterior, steel or wood roof framing and concrete slab on grade floors. The brick is in overall good condition on the newer single story additions.

The roof on the west and south portions of the building is a steep slope standing seam metal roof, while the remainder of the building has a low slope membrane roof. The insulation amounts could not be verified, however, it is assumed due to the age of the building and recent Energy Code requirement increases that it is below current Energy Code minimums. A newer building with code minimum insulation amounts in both the walls and roof would have a positive impact on the energy required to condition the building.

The exterior windows and doors are aluminum frame windows with dual pane insulated glass. Some windows are also wood clad windows with insulated glass. The windows are not energy efficient and are past their useful life. It is recommended to consider replacing the windows with dual pane, insulated LowE glass filled with Argon to enhance energy efficiency of the windows. The exterior doors are a combination of aluminum full glass entrance doors and also hollow metal doors and frames. All doors, frames and glass appear to be in good working condition. All doors appear to have the proper egress panic devices where required.

There is a parking lot on the north side of the site that allows for parking for staff and students. There is angled on street parking along North Chestnut Street to the east. This provides parking for visitors. Access to the building from the parking lot and streets is directly on grade or by exterior ramps, therefore accessibility requirements are met. The parking lot is not adequately sized for everyday use or for large athletic events, so students and spectators commonly park on side streets or across the street at the golf course. There is available land to the north and west of the back parking lot where additional parking could be added. The student pick-up and drop-off arrangement is a safety concern for both parents and school administration. With the highway running right in front of the school and no designated parent pick-up area, parents tend to park along the highway and students walk or run through the parking lot and across the busy highway to get to their parent's cars. A redesigned bus and parent pick-up / drop-off area should be considered on site to alleviate the safety concerns.










2.2.1 EDGEWOOD-COLESBURG JR/SR HIGH SCHOOL

INTERIOR

The interior environment varies depending on the part of the building examined. In the newer educational wing, the main corridors have a vinyl tile floor finish, while the classrooms are either carpet or vinyl tile. All flooring in this part of the building appears in good condition based on the age of the building. In the older classrooms, media center and music area the flooring is carpet and appears worn and torn in some areas and could be replaced in the next 5 – 10 years. The lower level of the original building has vinyl tile flooring, which is in average condition and could also be replaced in the next 5- 10 years.

The wall finishes throughout the majority of the building are painted concrete block, with some areas in the original building being glazed block. Ceilings are acoustic ceiling tiles in 2x2 or 2x4 sizes. The 2x2 tile ceilings are in good condition. The older 2x4 ceilings appear to sag a little due to the use of 2x4 tile and could be replaced with 2x2 tile in the future as needed. The casework that is installed is in good condition for the age of the building.

The interior doors are solid oak with hollow metal frames. The newer classroom addition has appropriate ADA door hardware, while most of the doors in the older parts of the building have knob style door hardware that does not meet accessibility requirements. Replacement of this hardware with lever-type hardware should be considered in the future to meet ADA code requirements for accessibility.

The main restrooms have painted concrete block walls, mosaic ceramic tile floors and phenolic toilet partitions. Although there is a ADA stall present, it does not meet accessibility requirements for a proper sized ADA stall. Secondary restrooms on the lower level do not meet accessibility requirements and the doors are too narrow for ADA requirements. The restrooms would need to be renovated and doors enlarged to meet requirements. The finishes within the restrooms are dated and worn and should be updated. The number of plumbing fixtures present is less than that required by current codes for the occupant load of the building. However, based on the actual number of students and staff the number seems adequate. If the student population increases or building additions added, more restrooms would need to be included.

Typical of school construction, most rooms have access to adequate natural lighting with windows. However, there are some rooms that are interior spaces without windows. These rooms could benefit from added natural lighting through the use of skylights to enhance the space. Natural lighting would reduce lighting costs as well as have a positive impact on student well-being and performance.

The classrooms all have typical marker boards and tack boards, as well as projection screens and ceiling mounted projectors in addition to wall mounted televisions. Modern classrooms feature interactive white boards and/or LED monitors on the walls. Some technology updates should be considered in the near future.

Interior furniture should be flexible and easy to reconfigure in a variety of layouts to support various learning environments. When needing to replace worn out furniture or adding to create collaboration space, look to implement flexible furnishings that will foster 21st Century Learning Environments.

While signage in the newer classroom addition appears to meet code, the signage in the older parts of the building does not include braille and is not in compliance with current ADA codes. Non-compliant signs should be updated in the near future.


206
IMC
WEL COME
to the
Library

2.2.1 EDGEWOOD-COLESBURG JR/SR HIGH SCHOOL

INTERIOR

The building includes an original gym on an upper level. The gym is accessed by way of an interior stairway. Accessibility is accomplished by way of a lengthy interior switch-back ramp. While this solution is acceptable, it is quite cumbersome. The original portion of the upper corridor that is open to below has a railing that doesn't appear to meet current code requirements for size of openings and is a safety concern. This railing should be replaced in the near future.

The lower level of the original building houses four locker rooms, a science classroom, special ed/life skills and art. The music area is also on a lower level. The only interior access to these areas of the building is by interior stairway. There is an ADA compliant accessible route provided, but it requires students and/or teachers to exit the building at the west end of the classroom wing, travel down an exterior ramp and then re-enter the building at the north central corridor. This is not considered an ideal way of meeting the accessibility requirements, especially given that a special ed/life skills room is on this level. It also causes a security threat as these exterior doors must be left unlocked throughout the day for students to get from one level, or portion of the building, to the other. Consideration should be given to adding an elevator for interior access to these spaces or relocating them to an accessible level. In addition, the music room has built-in risers and the teaching space is on the lowest level of the room, making it impossible for a wheelchair bound teacher to be at the center of the class. Accessibility for students is also a problem in the music room as anyone in a wheelchair only has access to the top tier of floor levels.

The lower level science room is an old original music room with built-in risers. The vinyl tile floor is in average condition, however, there are areas where the stair nosing is missing and tile is falling off the risers. Due to the built-in risers, the room does not meet accessibility requirements and would be impossible for a wheelchair bound student or teacher to use it. Thought should be given to relocating this classroom to the main level and/or a room without risers.

The locker rooms have mosaic ceramic tile floors, painted concrete block walls and concrete locker benches. The showers appear to have been updated recently with nice ceramic tile on the walls and updated shower assemblies, including an ADA unit. The restrooms also appear to have been updated recently with new toilet partitions. Lockers appear to have been replaced recently as well.


SUCCESS
EARNED


Vikings

2.2.1 EDGEWOOD-COLESBURG JR/SR HIGH SCHOOL

AREAS OF CONCERN:

- Lower amounts of insulation compared to a newer building increases energy usage.
- Some older interior finishes appear to be original and will need updating in the next 5 – 10 years.
- Knob style hardware should be replaced with accessible door hardware where necessary.
- Restrooms in some parts of the building should be renovated to meet accessibility requirements and finishes updated.
- The upper landing guardrail does not meet current building code requirements and should be replaced.
- Technology updates, such as interactive white boards and/or LED monitors, would enhance learning spaces.
- Interior furniture should be flexible and easy to reconfigure in a variety of layouts to support various learning environments. When needing to replace worn out furniture or adding to create collaboration space, look to implement flexible furnishings that will foster 21st Century Learning Environments.
- Interior signage should be replaced with ADA compliant signs where required.
- An elevator or relocation of lower level spaces should be considered to meet accessibility requirements.
- A redesigned parking area should be considered with designated pick-up / drop-off area to improve safety and add additional parking as needed.
- Windows are not energy efficient and should be replaced.

2.2.2 EDGEWOOD-COLESBURG JR/SR HIGH SCHOOL SHOP

EXTERIOR

The high school shop program is housed in a separate building that sits to the north of the existing high school. It is a pre-engineered steel building with metal roof and metal siding. It also has a lean-to on the northerly side. Although the walls and roof are insulated, the building uses a lot of energy taking a toll on the school's budget. The exterior siding is beat up and showing its age. Also, since this is a separate building students must go outside to get to it. This creates a security threat since school and shop doors must be left open throughout the day for students to get between buildings.

IMG_3534.JPG

IMG_3639.JPG

IMG_3641.JPG

IMG_3644.JPG

2.2.2 EDGEWOOD-COLESBURG JR/SR HIGH SCHOOL SHOP

INTERIOR

The interior of the building has concrete floors, metal liner panels and exposed insulation and exposed structure ceiling. There are some interior concrete masonry walls as well. The interior is poorly lit, crowded and dirty. A large portion of the space is being used as general school storage of desks and miscellaneous unused items. There is a double sized classroom inside the building that is in average condition.

IMG_3610.JPG

IMG_3613.JPG

IMG_3616.JPG

IMG_3617.JPG

IMG_3619.JPG

IMG_3620.JPG

2.2.2 EDGEWOOD-COLESBURG JR/SR HIGH SCHOOL SHOP

AREAS OF CONCERN:

- Lower amounts of insulation compared to a newer building increases energy usage.
- Shop tables appear to be original and could be updated in the next 5 – 10 years.
- Overcrowding due to storage of unnecessary items could be a safety concern.
- The separation from the main building is a security threat due to doors being left open for students to go back and forth.

2.2.3 EDGEWOOD-COLESBURG BUS MAINTENANCE FACILITY

EXTERIOR

The current bus maintenance facility sits just west of the high school. It is a concrete masonry building with some siding infills. The roof is wood framed with metal panels. Walls do not appear to be insulated. The windows are not energy efficient and are past their useful life. It is recommended to consider replacing the windows with dual pane, insulated LowE glass filled with Argon to enhance energy efficiency of the windows and/or consider replacement of the entire building.

IMG_3621.JPG

IMG_3633.JPG

IMG_3634.JPG

IMG_3642.JPG

2.2.3 EDGEWOOD-COLESBURG BUS MAINTENANCE FACILITY

INTERIOR

The interior of the building has concrete floors, concrete block and drywall walls and a solid ceiling with insulation placed on top of it. There are numerous areas where the ceiling is deteriorating and areas of mold can be seen due to apparent roof leaks. The concrete floor has cracks in it. The overhead doors are leaking water into the building around the bottom. The building is small, dark and overcrowded with only 1 bus stored inside.

IMG_3624.JPG

IMG_3625.JPG

IMG_3626.JPG

IMG_3627.JPG

IMG_3629.JPG

IMG_3630.JPG

IMG_3632.JPG

2.2.3 EDGEWOOD-COLESBURG BUS MAINTENANCE FACILITY

AREAS OF CONCERN:

- Lower amounts of insulation compared to a newer building increases energy usage.
- Windows are not energy efficient and are past their useful life.
- The building is old and deteriorating. Thought should be given to replacing it in the near future.
- Overcrowding due to storage of unnecessary items could be a safety concern.

2.2.4 EDGEWOOD-COLESBURG ELEMENTARY

EXTERIOR

The original section of the building is a two-story structure constructed of masonry bearing walls with brick cladding. This portion of the building was found to be in average condition for its age with minor masonry repairs needed at various locations due to damage and deterioration. The addition to the east is single story. It is constructed out of masonry cavity walls with brick exterior, wood truss roof framing and concrete slab on grade floors. The brick is in overall good condition on the newer single story addition.

The roof on the majority of the building is a steep slope standing seam metal roof. The insulation amounts could not be verified, however, it is assumed due to the age of the building and recent Energy Code requirement increases that it is below current Energy Code minimums. A newer building with code minimum insulation amounts in both the walls and roof would have a positive impact on the energy required to condition the building.

The exterior windows and doors are aluminum frame windows with dual pane insulated glass. Some windows are also wood clad windows with insulated glass. The windows are not energy efficient and are past their useful life. It is recommended to consider replacing the windows with dual pane, insulated LowE glass filled with Argon to enhance energy efficiency of the windows. The exterior doors are a combination of aluminum full glass entrance doors and also hollow metal doors and frames. All doors, frames and glass appear to be in good working condition. All doors appear to have the proper egress panic devices where required.

The building has two parking lots that allow parking for staff and visitors on the west and south sides. Access to the building from the parking lots are directly on grade, therefore accessibility requirements are met. The front parking lot for visitors is not adequately sized for everyday use and the back parking lot is not readily visible to visitors, so they commonly park on side streets quite a distance away and walk to the building. This front parking area could be reworked to gain a larger number of parking stalls. There is available land to the north of the back parking lot where additional parking could be added if more is still needed.

The playground and ball fields are located behind the building to the north. There was a lot of discussion by the students and staff that a few additional ball fields, such as a volleyball area for girls would be beneficial for students during recess. Consideration should be given to including some additional ball fields for added recess activities.

IMG_3497.JPG

IMG_7265.JPG

IMG_7266.JPG

IMG_7268.JPG

2.2.4 EDGEWOOD-COLESBURG ELEMENTARY

INTERIOR

The interior environment varies depending on the part of the building examined. In the newer educational wings, the main corridors have a terrazzo floor finish, while the majority of the rooms have vinyl tile with some having carpet. All flooring appears in average condition based on the age of the building. All corridor and classroom areas have vinyl base, which shows signs of age particularly in the corridors and could be replaced in the next 5–10 years.

Corridor lockers are metal and show signs of rust. These should be replaced in the next 5–10 years for aesthetic reasons.

The wall finishes throughout the majority of the building are painted concrete block. Ceilings are acoustic ceiling tiles in 2x4 sizes. Ceilings appear to sag a little due to the use of 2x4 tile and could be replaced with 2x2 tile in the future. The casework that is installed is in generally good condition for the age of the building.

The interior doors are solid oak with hollow metal frames. A majority of the doors in the building have knob style door hardware that does not meet accessibility requirements. Replacement of this hardware with lever-type hardware should be considered in the future to meet ADA code requirements for accessibility.

The main restrooms have painted concrete block walls, quarry tile floors and metal toilet partitions. They appear to meet accessibility requirements with proper sized wheelchair stall and access to the sinks. Secondary restrooms near the cafeteria do not have an accessible stall in the restrooms and the doors are too narrow for ADA requirements. The restrooms would need to be renovated and doors enlarged to meet requirements. The kindergarten restrooms have vinyl tile on the floors, which shows signs of age and should be replaced with a more durable flooring material appropriate for restrooms. The finishes within all restrooms are dated and worn and should be updated.

The front entrance and central court feature a large expanse of glass and clerestory windows that bring some natural lighting into the space. Typical of school construction, most rooms have access to natural lighting with windows. In general, most spaces have adequate daylighting. In special education rooms, teachers have tried to simulate special colored lighting effects with colored plastic over some lights. New or renovated buildings now incorporate color changing LED lighting that can have great effects on learning and moods for these types of spaces. Replacement of lighting in these spaces with these color changing LED lights should be considered.

The classrooms all have typical marker boards and tack boards, as well as projection screens and ceiling mounted projectors in addition to wall mounted televisions. Modern classrooms feature interactive white boards and/or LED monitors on the walls. Some technology updates should be considered in the near future.

Interior furniture should be flexible and easy to reconfigure in a variety of layouts to support various learning environments. When needing to replace worn out furniture or adding to create collaboration space, look to implement flexible furnishings that will foster 21st Century Learning Environments.

Signage in the building does not include braille and is not in compliance with current ADA codes. Signs should be updated in the near future.







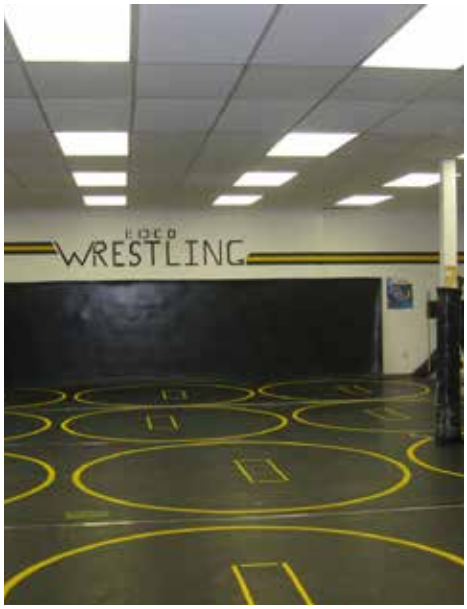




2.2.4 EDGEWOOD-COLESBURG ELEMENTARY

INTERIOR

The original 2-story building includes a gym on the upper level and four locker rooms, weight room, and three original classrooms on the lower level. The classrooms are currently being used for storage. The gym is currently used for junior high competitions. The gym is on the upper level and is accessed by means of interior ramps, which appear to be ADA compliant. However, the ramp guardrails don't appear to meet code requirements for size of openings and pose a safety hazard. Guardrails should be replaced where needed to meet current code requirements. The gym has exposed glue-lam roof beams which give it a unique and attractive appearance. However, windows are small and the room could benefit from some additional natural lighting. The gym floor is wood and is in average condition. Wood gym floor should be refinished as needed. The wrestling room is undersized and has interior columns which pose a safety hazard in a room of this use. The finishes are also in need of repair. The locker rooms are outdated and in need of some cosmetic updates as well as ADA updates to the restrooms to include accessible toilet stalls. If the gym and locker rooms will continue to be used, the locker rooms should be updated with new finishes and fixtures.


WRESTLING

2.2.4 EDGEWOOD-COLESBURG ELEMENTARY

AREAS OF CONCERN:

- Lower amounts of insulation compared to a newer building increases energy usage.
- Some older interior finishes appear to be original and will need updating in the next 5 – 10 years.
- Corridor lockers appear to be rusting and will need updating in the next 5 – 10 years.
- Knob style hardware should be replaced with accessible door hardware.
- Restrooms in some parts of the building should be renovated to meet accessibility requirements and finishes updated.
- Technology updates, such as interactive white boards and/or LED monitors, would enhance learning spaces.
- Interior furniture should be flexible and easy to reconfigure in a variety of layouts to support various learning environments. When needing to replace worn out furniture or adding to create collaboration space, look to implement flexible furnishings that will foster 21st Century Learning Environments.
- Interior signage should be replaced with ADA compliant signs.
- The ramp railings do not meet current building codes and should be replaced.
- Color changing LED lighting should be considered for special education spaces.
- Windows are not energy efficient and should be replaced.

2.3 MECHANICAL ASSESSMENT

On Friday, May 20, 2016 Mike Salmon of KCL Engineering met with representatives from Edgewood-Colesburg CSD to review and report on conditions of the mechanical and electrical systems.

The following report is intended to relay information based on findings observed during his site visit as they pertain to potential scope of work items for the Edgwood-Colesburg CSD. Recommendations have been provided as a guide to aid in the project scope decisions.

2.3.1 MECHANICAL ASSESSMENT | JR/SR HIGH SCHOOL

MECHANICAL:

Existing Conditions

1. The original portion of the building is heated by steam and/or hot water radiation, unit ventilators, cabinet heaters and unit heaters. Several of the unit ventilators don't work. The unit ventilators in the Commons have not worked in over two years.
2. A steam boiler and converters provide steam and heating water. One of the boiler feed pumps is not operational and needs replaced.
3. An old chiller and cooling tower provide chilled water for unit ventilators in the original portion of the building. This system has not worked for over 9 years. So there is no cooling in this portion of the building.
4. The main office is heated and cooled by a rooftop air handling unit. There are a lot of control issues with this system.
5. The kitchen exhaust systems need to be addressed. There does not appear to be adequate exhaust.
6. The newer addition is heated and cooled by a geothermal system. Air handling units provide ventilation air to larger spaces. These systems appear to be in good condition.
7. Most of the exhaust systems in the building are operational. Restrooms and locker rooms need better control. There is no fan associated with the Kiln hood.
8. The original building has an old Johnson Controls pneumatic control system that is not in good shape. The new addition has a Woodman Controls direct digital control (DDC) system.
9. There is no ventilation in the Science Room. Supplemental DX cooling has been added to provide cooling.

Recommendations

1. The original building HVAC system needs to be updated to provide adequate heating, cooling and ventilation for the building. ***($28 - $32 per square foot of area covered)***
2. The DDC control system in the newer addition should be extended to control new systems installed in the original portion of the building. ***($3 per square foot of area covered)***
3. Exhaust air flow needs to be addressed throughout the building. New fans should be installed for areas without adequate exhaust. ***($2500 - $3500 per fan)***

PLUMBING:

Existing Conditions

1. The main incoming water service has adequate back flow protection.
2. The water heater is newer and in good operating condition.
3. Some of the plumbing fixtures are older and need to be replaced. Some of the water closet floor flange wax rings are leaking and need to be replaced.
4. Flush valves and faucets are manual type.
5. The building needs additional dual height electric water coolers to meet ADA requirements. Most units are the single height type.
6. The original portion of the building has galvanized piping.

Recommendations

1. Install new low flow plumbing fixtures. ***($2000 per fixture)***
2. Update domestic water piping to copper. ***($20,000 - $30,000)***

FIRE PROTECTION:

Existing Conditions

1. There is no fire sprinkler system in the building.

Recommendations

1. If there is adequate smoke detector coverage, there is no need for a new system. ***($3.75 per square foot of area covered if a system is to be added)***

2.3.1 MECHANICAL ASSESSMENT | JR/SR HIGH SCHOOL

ELECTRICAL:

Existing Conditions

1. Most of the light fixtures have been converted to T8 lamps and ballasts. The lower hallway still has older fixtures that continue to have ballast issues. No LED fixtures have been installed other than a few exterior wall pack fixtures.
2. There are no occupancy sensors for lighting control in the building.
3. There are some areas in the building without adequate emergency light fixture coverage.
4. Parking lot light fixtures are old.
5. The building appears to have adequate power service and there are no power quality issues. Breaker panels in the original building are original and problematic. Breakers are not labeled.
6. Science rooms appear to be short on power receptacles.
7. A new Simplex fire alarm system was installed in 2004. Unfortunately, this system has been discontinued by Simplex. The building is fully detected, except for the music room and district offices.
8. There is no access control for the building. A camera system was installed in 2004 that is expandable. There are only a few cameras installed, but not complete coverage.
9. The building has a complete wired data system, as well as, wireless access points. The phone system is separate from the data system.
10. The intercom and sound systems are old, but operational. The clock system is an old hard wired system. The school is unable to adjust the system.

Recommendations

1. Upgrade building lighting with LED fixtures and occupancy sensors to meet energy code. ***($7 per square foot of area covered)***
2. Add emergency light fixtures in areas without sufficient coverage. ***($2000 - $2500)***
3. Replace original building switchgear, panels and conductors. ***($100,000 - $125,000)***
4. Provide additional receptacles in Science classrooms. ***($300 per receptacle)***
5. The fire alarm system will need to be replaced within the next five years. Include coverage in the music room and district offices. ***($1.50 per square foot of area covered)***
6. Consider access control project to provide security within the building. ***(Cost varies, depending on scope)***
7. Install additional security cameras. (***$300 - $500 per camera)***
8. Upgrade phone, intercom, sound and clock systems. ***(Cost varies, depending on scope)***

2.3.2 MECHANICAL ASSESSMENT | JR/SR HIGH SCHOOL SHOP

MECHANICAL:

Existing Conditions

1. The building is heated by gas fired radiant heaters. These units are at the end of their useful life expectancy. Thermostats are protected with enclosures.
2. There are ceiling fans in the shop area to move air around.
3. The welding area has a hood over the stations.
4. The paint/finish room has a sidewall exhaust fan that is not designed for that purpose.

Recommendations

1. Replace the radiant heaters with new equipment. ***($30,000 - $35,0000)***
2. Check welding exhaust fan and replace if required. ***($1500 - $2500)***
3. Provide new exhaust system for the paint/finish room. ***($2500 - $3500)***

PLUMBING:

Existing Conditions

1. The plumbing fixtures are original to the building and are outdated.
2. Water piping is a mixture of galvanized and PVC piping.
3. The electric water heater is near the end of its life expectancy.

Recommendations

1. Install new low flow plumbing fixtures. ***($2000 per fixture)***
2. Update domestic water piping to copper. ***($4000 - $7000)***
3. Replace water heater. ***($1000 - $2000)***

FIRE PROTECTION:

Existing Conditions

1. There is no fire sprinkler system in the building.

Recommendations

1. If there is adequate smoke detector coverage, there is no need for a new system.

ELECTRICAL:

Existing Conditions

1. The lighting is outdated and not energy efficient.
2. The main switchgear appears to be in good shape.
3. There are not enough receptacles for power in the shop area.

Recommendations

1. Replace the lighting with LED fixtures. ***($7 per square foot of area covered)***
2. Install new power receptacles around the shop area. ***($400 - $500 per receptacle)***

2.3.3 MECHANICAL ASSESSMENT | BUS MAINTENANCE FACILITY

MECHANICAL:

Existing Conditions

1. The building is heated by a gas fired unit heater hanging in the service area.
2. There is no ventilation or exhaust in the building.

Recommendations

1. Replace the unit heater with a more efficient gas fired radiant heater. ***($20,000 - $25,0000)***
2. Install an electric cabinet heater in the restroom. ***($2000 - $3000)***
3. Provide exhaust for building ventilation. ***($10,000 - $15,000)***

PLUMBING:

Existing Conditions

1. The plumbing fixtures are original to the building and are outdated.
2. Water piping is a mixture of galvanized and PVC piping.
3. The electric water heater is near the end of its life expectancy.
4. There are no floor drains in the facility.

Recommendations

1. Install new low flow plumbing fixtures. ***($2000 per fixture)***
2. Update domestic water piping to copper. ***($4000 - $7000)***
3. Replace water heater. ***($1000 - $2000)***
4. Install trench drains in the shop area. ***($5000 - $10,000)***

FIRE PROTECTION:

Existing Conditions

1. There is no fire sprinkler system in the building.

Recommendations

1. If there is adequate smoke detector coverage, there is no need for a new system.

ELECTRICAL:

Existing Conditions

1. The lighting is outdated and not energy efficient.
2. There is a mixture of both fuses and circuit breakers serving the building.
3. There are not enough receptacles for power in the shop area.

Recommendations

1. Replace the lighting with LED fixtures. ***($7 per square foot of area covered)***
2. Replace the main switch board to accommodate power needs within the building. ***($10,000 - $12,000)***
3. Install new power receptacles around the shop area. ***($400 - $500 per receptacle)***

2.3.4 MECHANICAL ASSESSMENT | ELEMENTARY

MECHANICAL:

Existing Conditions

1. The building is heated and cooled by a boiler and chiller in the mechanical room. Unit ventilators are installed around the building. The unit ventilators are noisy and do not maintain a constant temperature.
2. The building has a direct digital control system by Woodman Controls.
3. The lunchroom and gymnasium are heated via a steam boiler and unit heaters.
4. The restroom exhaust systems appear to draw humidity into the building in the summer.
5. There is no cooling for the kitchen. No make-up air system for the exhaust hood.

Recommendations

1. Should consider replacement of the HVAC system in the next five years. ***($28 - $30 per square foot of area covered)***
2. Building exhaust and ventilation should be upgraded. ***(Cost varies, depending on scope)***
3. Cooling and make-up air should be provided for the kitchen. ***($25,000 - $35,000)***

PLUMBING:

Existing Conditions

1. There is a lot of rust in the water when the city flushes the water mains.
2. Plumbing fixtures appear to be in good condition. Some of the fixtures are showing wear. Flush valves are sensor type.
3. Wash fountains are showing age.
4. There are no ADA compliant dual height electric water coolers.

Recommendations

1. Install blow-down piping and valves at the water service entrance to aid in cleaning and flushing the main piping feeding the elementary building. ***($300 - $500)***
2. Replace wash fountains. ***($1500 - $2000 per dual height unit)***
3. Install dual height electric water coolers. ***($1500 - $2000 per dual height unit)***

FIRE PROTECTION:

Existing Conditions

1. There is no fire sprinkler system in the building.

Recommendations

4. If there is adequate smoke detector coverage, there is no need for a new system. ***($3.75 per square foot of area covered if a system is to be added)***

ELECTRICAL:

Existing Conditions

1. The light fixtures are all the T8 lamp type fixtures. LED lighting was priced, but not installed.
2. There are some areas in the building without adequate emergency light fixture coverage, mainly corridors.
3. There are only 1 or 2 exterior wall pack fixtures that do not provide adequate coverage.
4. The parking lot lighting is inadequate.
5. There appears to be adequate power for the facility and there are no power quality issues. However, there are not enough receptacles in the corridors.
6. The Notifier fire alarm system appears to be in good working condition. There is sufficient coverage in the building.
7. There is no access control system in the building and the camera system is not good.
8. The phone, paging and gym sound systems are in good condition. The building has a newer wireless atomic clock system that is in good condition.

Recommendations

1. Consider LED lighting upgrade and occupancy sensors. ***($7 per square foot of area covered)***
2. Provide additional emergency light fixtures to meet code. ***($100 per fixture)***
3. Upgrade exterior building and parking lot lighting. ***($4000 per pole and $1000 per building mounted)***
4. Add corridor receptacles. ***($300 per receptacle)***
5. Consider access control project to provide security within the building. ***(Cost varies, depending on scope)***
6. Install additional security cameras. ***($300 - $500 per camera)***

2.4 COST INDEX

The Cost Index's purpose is to provide an opinion of what it would take to update your facilities without changes or additions. The items and costs are not intended to be a list of projects that should be started for the facilities, but rather used to develop a comparison when evaluating all facilities as a whole.

Edgewood-Colesburg CSD Master Plan Cost Index

StruXture Architects

Cost Index **8/15/16**

Totals

Jr/Sr High School	
• Lower amounts of insulation compared to a newer building increases energy usage.	n/a
• Some older interior finishes appear to be original and will need updating in the next 5-10 years.	$600,000.00
• Knob style hardware should be replaced with accessible door hardware where necessary.	$20,000.00
• Restrooms in some parts of the building should be renovated to meet accessibility requirements and finishes updated.	$135,000.00
• The upper landing guardrail does not meet current building codes and should be replaced.	$3,000.00
• Technology updates, such as interactive white boards and/or LED monitors, would enhance learning spaces.	n/a
• Interior signage should be replaced with ADA compliant signs where required.	$5,000.00
• Windows should be replaced with new energy efficient windows.	$75,000.00
• Sand, Paint & Refinish Gym Floor	$20,000.00
• New Finish Coat on Gym Floor	$3,000.00
Jr/Sr High School Shop Building	
• Lower amounts of insulation compared to a newer building increases energy usage.	n/a
• Shop tables appear to be original and could be updated in the next 5-10 years.	$7,500.00
Bus Maintenance Facility	
• Lower amounts of insulation compared to a newer building increases energy usage.	n/a
• Windows are not energy efficient and are past their useful life.	n/a
Elementary School Renovations/Addition	
• Lower amounts of insulation compared to a newer building increases energy usage.	n/a
• Some older interior finishes appear to be original and will need updating in the next 5-10 years.	$300,000.00
• Corridor lockers appear to be rusting and will need updating in the next 5-10 years.	$100,000.00
• Knob style hardware should be replaced with accessible door hardware where necessary.	$41,000.00
• Restrooms in some parts of the building should be renovated to meet accessibility requirements and finishes updated.	$450,000.00
• Technology updates, such as interactive white boards and/or LED monitors, would enhance learning spaces.	n/a
• Interior signage should be replaced with ADA compliant signs where required.	$10,000.00
• The ramp railings do not meet current building codes and should be replaced.	$10,000.00
• Windows should be replaced with new energy efficient windows.	$175,000.00
• Sand, Paint & Refinish Gym Floor	$20,000.00
• New Finish Coat on Gym Floor	$3,000.00

The amounts stated herein are our best estimate of probable construction costs based on current information. Because costs are influenced by market conditions, changes in project scope, and other factors beyond our control, we cannot ensure that actual construction costs will equal this cost opinion.

STAKEHOLDER INPUT

3

3.1 OVERVIEW

A total of six stakeholder meetings were held on May 18, 2016. It is imperative to allow the stakeholders to share their thoughts and opinions, specifically if the district will seek approval of additional bond measures in order to implement long range plans. The forum also creates a transparent process between the district and the community. This process looks at all users of the facilities, the type of spaces that are needed for each user, both internal and external, the numbers of spaces needed, adjacencies and traffic patterns. We also looked at how the flow of the buildings worked from a guest point of view. What are they experiencing when visiting Edgewood-Colesburg Community School District Facilities?

3.2 FOCUS GROUPS

On May 18, 2016, various meetings were held throughout the day to gather thoughts, input and information from Edgewood-Colesburg Community School District staff, students and community members. Representatives from StruXture Architects facilitated meetings with the various groups. Meetings began with a Twenty-first Century Learning Space presentation, followed by exercises to gather feedback. Ideas were captured on large post-it notes and discussed further. Questions were also asked and answers written on large note pads.

Following is a summary of meeting groups & locations and feedback.

Focus Group Meeting 1

Location: Junior/Senior High School, Edgewood

- Administration (superintendent, principal, curriculum, head of facilities, AD)
- Some faculty
- Board members
- Community members

Focus Group Meeting 2

Location: Junior/Senior High School, Edgewood

- Students

Focus Group Meeting 3

Location: Elementary School, Colesburg

- Administration (superintendent, principal, curriculum, head of facilities, etc.)
- Some faculty
- Board members
- Few people from community

Focus Group Meeting 4

Location: Elementary School, Colesburg

- Students

Focus Group Meeting 5

Location: Elementary School, Colesburg

- Staff (open to all staff)

Focus Input Community Group 1

Location: Elementary School, Colesburg

- Community members

Focus Input Community Group 2

Location: Junior/Senior High School, Edgewood

- Community members

3.2 FOCUS GROUPS

Educational Best Practice Exercise asked stakeholders to share their top 5 things that they feel the district needs to address, build or renovate. Individuals were each given 5 large sticky notes to write their thoughts. We then asked them to share items with the group. Those that wrote similar answers were grouped together and hung on the wall as additional questions were asked to understand exactly what the comments meant. We have organized items in order of most often mentioned projects to least often, per each building.

3.3 FOCUS GROUPS TOP FIVE LIST | JR/SR HIGH SCHOOL

Top 5 things you feel the district needs to address, build or renovate. Numbers indicate specific number of people that identified a need.

GYMNASIUM: 17

- New, bigger gym -6
- Remodel -1
  - Gym floor redone-3
  - Better, safer bleachers -2
  - Air conditioning -3
  - New ramp- different
  - Better walls- fix walls in existing -3
- Sports complex improvements
- Update locker rooms 2
- Gym/auditorium combo -2

AUDITORIUM -12

- Plays
- Choir
- Drama
- Band
- Ceremonies
- Large group assemblies
- Lecture hall
- Strength arts program

PARKING/BUS

- Need more parking -13
- Need better circulation including pick up -7
- New bus barn -6
- Safety
  - Need speed bumps in parking lot
  - Better drop off

LIBRARY

- Very unwelcoming
- More windows in library-2
- More hands on things in here (ex: Legos, puzzles)
- Comfortable seating
- Computers

ART ROOM-2

- More workspace
  - Pottery
- Better work place
- Combine space for art and shop

SHOP

- Space for welding
- Improvement for hands on learning
- Tool upgrades
- Repair/renovation
- Combine space for art and shop

AG- INDUSTRIAL TECH -2

- Highest need jobs are in advanced manufacturing

CLASSROOMS

- More windows/ glass
- Update finishes -2
- Bigger
- Additional
- New desks/chairs

ADDITIONAL SPACE

- Small group/individual work spaces -6
  - Cave space
  - Possible location space between the science rooms
  - Couches/sofas
  - Plug in spots
- Computer labs
- Maker Space
  - Area for creativity and innovation

3.3 FOCUS GROUPS TOP FIVE LIST | JR/SR HIGH SCHOOL

BUILDING SECURITY

- Front Entry -10
  - Needs to be inviting
  - Secure -5
  - New sign out front
  - Focal point, so guests know where to enter
    - Not so plain

REMODEL LOWER HALL

- Locker rooms -2
- Commons
- Office
- Library
- Restrooms-3

GIRLS RESTROOM BY LUNCH ROOM/COMMONS

- Update -3

HVAC UPDATES -17

- Energy efficient, green initiatives
- Lights
- Solar-3
- Noise (too loud)
- Needs to be working
- Need new drinking fountains

TECHNOLOGY-5

- Updates software
  - Stay with the times
- WiFi
- Better programs
- Upgrades in classrooms
- Access/hardware
- Mimeo board

JR. HIGH LOCKERS- NEED NEW-2

- Large enough for backpacks

MAINTAIN EXISTING -3

- Keep up with exterior building upgrades
  - New windows
- Keep up with interior maintenance -2
  - Update bathrooms
    - Faucets, sinks, doors, toilets, water flush valves
  - Update interior of building
    - Leader in me style- colorful, inviting

MISCELLANEOUS ITEMS:

- Bleachers around ball diamond and concession stand -4
- Hallways are cramped
- Kitchen facilities
- Flooring separating from walls in rooms
- Cafeteria
- Choir room separate from band
- Outdoor activity classes
- Long range plan for district
- Connecting with community

3.3 FOCUS GROUPS TOP FIVE LIST | ELEMENTARY

Top 5 things you feel the district needs to address, build or renovate:

HVAC UPDATES -4

- Green initiatives
- Existing is too noisy -4
- Additional water fountains

GYMNASIUM

- New flooring -4
- Make gym bigger-3

ADDITIONAL SPACE

- Cave spaces-5
- Renovate learning spaces 4-6th
  - Make like a middle school concept
  - More spacious
- Collaboration spaces-2
  - Relaxing spaces with comfortable, mobile furniture 3
- Science room-2
- More classrooms -2
- Reading area in library -2

SECURE ENTRY—2

MISCELLANEOUS ITEMS:

- Update restrooms
- Better wresting room
- Skylights
- Windows need replaced -3

EXTERIOR

- Parking-2
  - More
- Building improvements
  - Needs nice front yard
  - Better, more visible front entrance
- Garden/outdoor learning area- 4
- Activities -2
  - Volleyball nets outside-3
  - Football field for recess
  - Soccer field for recess
  - Baseball space
  - Bigger basketball hoops-2
  - Concrete play space -2
    - Existing needs to be redone
  - New playground equipment -6
    - Fix or replace
    - More swings
- Replace picnic tables
- Benches with backs

GENERAL NOTE:

- All buildings need to be handicap accessible-3
  - Door hardware -2

3.4 FOCUS GROUPS | 21ST CENTURY LEARNING SPACE

Images of 21st Century Learning Environments were shared with students who then commented on the spaces that they would like incorporated into their facilities. All comments are incorporated in the list above. Some of the most popular images are shared below:

3.5 FOCUS GROUPS QUESTIONS

A handful of questions were asked about the district and answers were discussed and recorded. Following are the results based on the items that were mentioned more than once. Numbers indicate multiple number of people that commented on the answer.

What makes your district so successful and unique?

- Employees as a whole, great staff that cares -5
- A very giving districts (service projects), community support -5
- Grads return to community -3
- Small class sizes -3
- Good support services: Special Ed/Title 1 -2
- Successful extracurricular act/ more opportunities for kids -2

What about Edgewood-Colesburg and the school district are you most concerned about?

- Sustainability/ consolidation / declining enrollment -5
- Attracting/keeping teachers in small community -4
- Length (time) on bus for students/ transportation -3
  - Cost of busing
- State funding/ financial stability -3
- Safety/secure entrance -2
- Maint/upkeep of facilities -2
  - Building infrastructure
- Leadership/ administration and staff burnout -3

How do you see education changing in the next 10 years?

- Technology -5
- Travel/sharing w/other schools to get students classes needed, online cooperation -3
- More need for prep for technical careers -2
- Project based learning/ different teaching methods/ techniques -3
- Teaching collaboration -2

What inhibits you from reaching your goals in your current facility?

- Money -3
- Maintenance (heating/plumbing issues)
  - Noisy heaters -3
  - Boiler update/replace -3
  - General building upkeep
- Internet connections/technology -3
- Size of athletic facilities -2
  - Gym too small to host
- Performance facilities -2
- Lack of a long term plan -2
- Landlocked -2
  - Buy additional property
- Student safety -2
  - Multiple entrances
- Communication/collab w/community + city -2

Is there anything you feel the District needs to address, build or renovate?

- Bus barn/pick up/drop off safety -parking, more parking -8
  - Utilize old football field space better
  - Use local mechanic
- Safety/security-building -3
  - Buzz in secure entrance
  - Exterior signage
  - Security concern w/separate entry
  - Inviting entry, windows, not so plain
- Gym -3
  - New gym -3
  - Repair walls of existing
  - Refinish floors
  - New bleachers
- Auditorium -3
  - Strengthen arts program
- Heating/cooling -3
  - Alt energy-energy efficient
  - Geothermal
  - Solar
- Update Technology -4
- Baseball/bleachers/concessions -3
  - Football bleachers code update
  - Football locker rooms
- Building updated -2
  - Finishes
  - General upkeep
- HVAV- Ac at elementary – need -2
- Parking needed/ safety loading -2

EDUCATIONAL SPECIFICATION

4

4.1 OVERVIEW

Programming is a critical stage of the design processes. This process reviews data collected as it pertains to the use of the building. Seeing how the spaces are used allows the Design Team to assign an ideal square footage for that activity. These spaces become the Standards and are referenced throughout the processes as a benchmark for a size required for that space. This list of spaces and square footages becomes the building Program. The next step is to review the existing spaces of the facility and assign them also to a specific use function. The Team can then compare the ideal building Program with the available space, and this becomes the Facility Program.

4.2 PROGRAMMING STANDARDS

The Program compares existing spaces with ideal, or required space to do the associated task. The ideal space is based off of similar projects, information gathered from the Users, and industry standards.

The charts following show how each facility compares in size from what is currently built, to the ideal space needed for each task. The tasks are color coded where notable discrepancies were found between ideal Program and existing spaces. Yellow indicates areas where the actual space is larger or smaller than the ideal Program indicates. Blue indicates spaces that would be included in new school buildings, but are lacking in the existing facility.

4.2.1 PROGRAMMING STANDARDS | JR/SR HIGH SCHOOL

School District of Edgewood-Colesburg | **Jr/Sr High School Program** | **Jr/Sr High School Program**

Ideal Space Program - 7-12 Building — 7/27/16

Program Space	No. Req'd	Area Req'd	Program Area-Tot	Occupancy	Tot. Occupcy
7/8/9/10/11/12 Grade					0
Math Classrooms	2	850	1,700	24	48
LA Classrooms	2	850	1,700	24	48
SS Classrooms	2	850	1,700	24	48
Spanish Classrooms	1	850	850	24	24
ICN = Study Hall / Technology	1	850	850	24	24
Guidance Class	1	850	850	24	24
ELP/Study Hall/Health	1	850	850	24	24
Science/AG/F&C	1	1200	1,200	24	24
Science Labs	2	1200	2,400	24	48
Science Prep / Storage	2	220	440		0
Small Group/Project/ Flex	2	1000	2,000		0
Teacher Collaboration	0	500	0		0
Storage	3	200	600		0
Lockers	0	80	0		0
Special Education					
Success Center	2	900	1,800	10	20
Spec. Ed Storage	2	60	120		0
Spec. Ed Focus Area	2	40	40		0
Toilet	1	40	40		0
sub-total			**17,140**		
Arts					
2D/3D Art Classrooms	1	900	900	0	0
Art storage / Kiln	1	200	200		0
Vocal Music	1	1100	1,100	0	0
Instrumental Music	1	1600	1,600	0	0
Instrument Storage	1	200	200		0
Music Practice	2	80	160		0
Music storage	2	80	160		0
Music Office	2	200	400		
Computer Classroom	0	1000	0		0
F&CS Lab / Classroom	1	1200	1,200	0	0
F&CS Stroage	1	150	150		0
Shop/Industrial Tech	1	2300	2,300		0
Storage/Classroom	1	600	600		0
Auditorium	1	3550	3,550		0
Stage	1	1840	1,840		0
sub-total			**14,360**		
Media Center	1	5 SF /Student	1,275		0
Media Office	1	250	250		0
sub-total			**1,525**		
Food Service					
Dining	1	5 SF /Student	1,275		0
Student Commons	1	1500	1,500		0
Kitchen	1	1000	1,000		0
Serving	1	620	620		0
sub-total			**4,395**		
Physical Education					
Gymnasium	1	9500	9,500		0
PE Storage	1	400	400		0
Athletic Storage	1	400	400		0
PE/Coach Office/AD	3	120	360		0
Concessions	1	250	250		0
Varsity Locker Rooms/Toilets/Swrs	2	800	1,600		0
Locker Rooms/Toilets/Swrs	2	500	1,000		0
Wrestling/Activity	1	1880	1,880		0
Weights	0	1200	0		0
Practice Gym	1	6300	6,300		0
sub-total			**21,690**		
Administration, Misc					
School Office	1	500	500		0
Principal Office	1	200	200		0
Superintendent Office	1	220	220		0
Conference Room	1	350	350		0
Superintendent Sec. Office	1	150	150		0
Work Area	1	200	200		0
Records	1	90	90		0
IT work area	1	350	350		0
Health Office	1	200	200		0
Health Toilet	1	70	70		0
ISS	2	25	50		0
Teacher Team office/work	0	450	0		0
Staff Lounge	1	400	400		0
Staff Toilets	2	60	120		0
Guidance	1	150	150		0
Office	1	150	150		0
Conference Room	1	250	250		0
Custodian Areas	3	60	180		0
Custodian Storage	1	300	300		0
General Storage	1	900	900		0
sub-total			**4,830**		
Designated Program Area			**63,940**		
Mechanical Areas	10%		6,394		
Circulation/Restrooms	20%		12,788		
Building Services	5%		3,197		
Total Building Area			**86,319**	**Core Capacity**	**332**

Existing Building Allocation

Current High School	no. Avl.	Area	Occ.	Program Area Avl.	Occupancy	Available Tot. Occupancy
				0		0
Math	2	730		1,460	24	48
Lang Arts	3	738		2,214	24	72
History	3	745		2,235	24	72
Spanish	1	735		735	24	24
ICN	1	733		733	24	24
Math/Tech	1	460		460	24	24
Business/Computers	1	734		734	24	24
Science Labs	2	1064		2,128	24	48
Prep/Storage	1	376		376		0
Science Lab	1	1034		1,034	24	24
Storage	2	43		86		0
Science Office	1	84		84		0
				0		0
				0		0
				0		0
Special Education						
Resource	1	460		460	0	0
Special Ed/Life Skills	1	969		969	10	10
Storage	1	92		92		0
				0		0
Sub-total			**13,800**	0		0
Arts						
Art Classroom	1	880		880	0	0
Art storage / Kiln	1	153		153		0
				0	0	0
Instrumental Music	1	2712		2,712	0	0
Music Storage	2	227		454		0
Music Practice	2	45		90		0
Music Library	1	147		147		0
Music Office	2	133		266		0
				0		0
F&CS Lab / Classroom	1	1343		1,343	0	0
				0		0
Shop/Ind Tech	1	7267		7,267		0
				0		0
				0		0
			0	0		0
Sub-total			**13,312**			
Media Center	1	2514		2,514		0
Media Office	1	275		275		0
Materials	1	96		96		0
Meeting Room	1	223				0
Sub-total			**2,789**			
Food Service						
Dining/Student Commons	1	2734		2,734		0
				0		0
Kitchen	1	341		341		0
Storage	1	130		130		0
Sub-total			**3,205**			
Physical Education						
Gymnasium	1	7165		7,165		0
Stage	1	2176		2,176		0
				0		0
				0		0
				0		0
Boys LckRms/Tlt/Shwr	1	796		796		0
Boys LckRms/Tlt/Shwr	1	493		493		0
Girls LckRms/Tlt/Shwr	1	705		705		0
Girls LckRms/Tlt/Shwr	1	599		599		0
				0		0
Sub-total			**11,934**			
Administration, Misc						
School Office	1	228		228		0
Principal Office	1	86		86		0
Office	1	92				
Superintendent Office	1	301		301		0
Board Room	1	451		451		0
Board sec	1	167		167		0
Work Room	1	205		205		0
School Office	1	366		366		0
Vault/Safe/Records	1	56		56		0
I.T. - "Hub"	1	153		153		0
Nurse	1	92		92		0
Nurse Tlt	1	33		33		0
Staff Lounge	1	244		244		0
Guidance	1	157		157		0
Guidance	1	119		119		0
Storage	1	29		29		0
Storage	1	70		70		0
				0		0
Custodian Storage	1	35		35		0
Boiler Room	1	410		410		0
Storage	1	504		504		0
Sub-total			**3,706**			
Designated Program Area				**48,842**		
Mechanical Areas	10%			4,884		
Circulation/Restrooms	20%			9,768		
Building Services	5%			2,442		
Total Building Area				**65,937**	**Core Capacity**	**370**

EDUCATIONAL SPECIFICATION

4.2.1 PROGRAMMING STANDARDS | ELEMENTARY

School District of Edgewood-Colesburg — Elementary School Program

Ideal Space Program - PK-6 Building

7/27/16

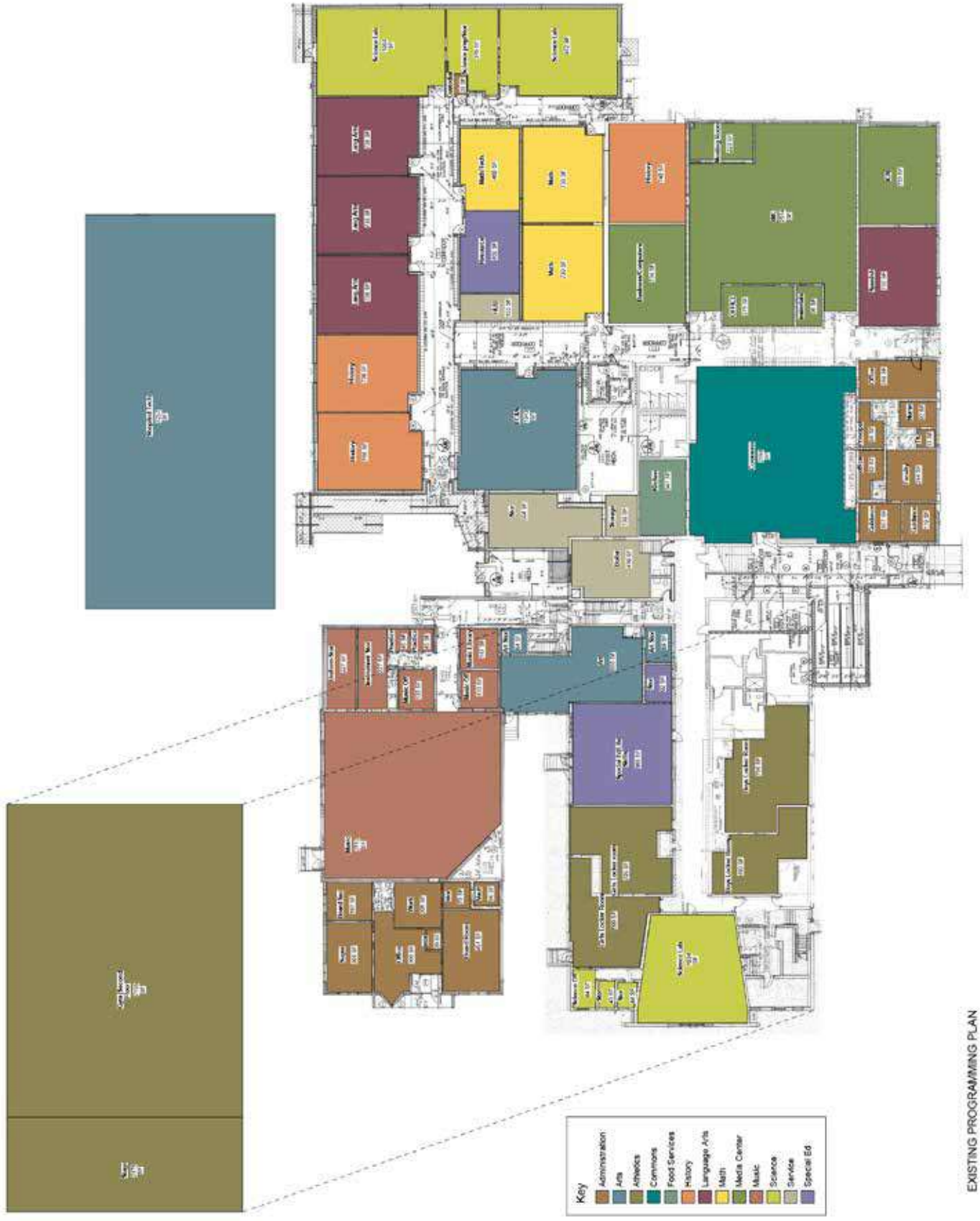
Program Space	No. Req'd	Area Req'd		Program Area Total		Occupancy	Total Occupcy
Pre-K							
Classroom	1	1200	SF	1,200	SF	24	24
Classrooms	1	1200	SF	1,200	SF	24	24
Restrooms	0	60	SF	0	SF	0	0
Storage	0	150	SF	0	SF		0
Kindergarten			SF		SF		0
Classroom	2	1200	SF	2,400	SF	24	48
Classrooms		1200	SF	0	SF	0	0
Restrooms	2	60	SF	120	SF		0
Storage	2	150	SF	300	SF		0
Teacher Collaboration		500	SF	0	SF		0
Storage	0	300	SF	0	SF		0
1/2/3/4 Grade							0
First Grade	2	850	SF	1,700	SF	24	48
Second Grade	2	850	SF	1,700	SF	24	48
Third Grade	2	850	SF	1,700	SF	24	48
Fourth Grade	2	850	SF	1,700	SF	24	48
Fifth Grade	2	850	SF	1,700	SF	24	48
Sixth Grade	2	850	SF	1,700	SF	24	48
			SF		SF		
			SF		SF		
Small Group/Project/ Flex	2	850	SF	1,700	SF	0	0
Special Education			SF		SF		
Success Center	1	900	SF	900		10	10
Spec. Ed Storage	1	60	SF	60	SF		0
Level 2/3 Room	1	600	SF	600	SF	5	5
Toilet	0	60	SF	0	SF		0
Title 1	1	300	SF	300		5	**5**
Arts				0			
2D/3D Art Classrooms	1	900	SF	900	SF	0	0
Art storage	1	200	SF	200	SF		0
Music	1	900	SF	900	SF	0	0
Instrumental Stor	1	200	SF	200	SF		0
Computer Classroom	0	1000	SF	0	SF		0
sub-total				**13,720**			
Media Center		5 SF /Student	SF	1,525	SF		0
Media Office		250	SF	0	SF		0
sub-total				**1,525**			
Food Service							
Dining		3.5 SF /Student	SF	1,068	SF		0
Kitchen/Dish		1000	SF	0	SF		0
Serving		800	SF	0	SF		0
sub-total				**1,068**			
Physical Education							
Multipurpose	1	3200	SF	3,000	SF		0
PE Storage		400	SF	0	SF		0
concessions	1	200	SF	0			
sub-total				**3,000**			
Administration, Misc							
School Office	1	500	SF	500	SF		0
Principal Office	1	160	SF	160	SF		0
Conference Room	1	250	SF	250	SF		0
Work Area	1	200	SF	200	SF		0
Records	1	90	SF	90	SF		0
IT work area		150	SF	0	SF		0
Health Office	1	200	SF	200	SF		0
Health Toilet	1	70	SF	70	SF		0
Sensory Room (t.o.)	1	40	SF	40	SF		0
Staff Lounge	0	400	SF	0	SF		0
Staff Toilets	1	60	SF	60	SF		0
Guidance	1	150	SF	150	SF		0
Custodian Areas	1	60	SF	60	SF		0
Custodian Storage	1	300	SF	300	SF		0
General Storage	0	900	SF	0	SF		0
sub-total				**2,080**			
Designated Program Area				**28,853**			
Mechanical Areas	8%			2,308			
Circulation/Restrooms	20%			5,771			
Building Services				0			
Total Building Area				**36,931**		**Core Capacity**	**404**

Existing Building Allocation

Current Elementary School	no. Avl.	Area		Program Area Total		Occupancy	Total Occupany
Pre-K							
Classrooms	2	1007	SF	2,014	SF	24	48
Restrooms	2	35	SF	70	SF		
Storage	1	124	SF	124	SF	0	0
Coats	1	208	SF	208	SF	0	0
Kindergarten							
Classrooms	2	885	SF	1,770	SF	24	48
1/2/3/4/5/6							
First Grade Classroom	2	885	SF	1,770	SF	24	48
Second Grade Classroom	2	885	SF	1,770	SF	24	48
Third Grade Classroom	2	885	SF	1,770	SF	24	48
Fourth Grade Classroom	1	855	SF	855	SF	24	24
Fourth Grade Classroom	1	885	SF	885	SF	24	24
Fifth Grade LA/SS	1	885	SF	885	SF	24	24
Sixth Grade LA/SS	1	885	SF	885	SF	24	24
Fifth&Sixth Math	1	885	SF	885	SF	24	24
Fifth &Sixth Science	1	885	SF	885	SF	24	24
Science Storage	1	129	SF	129	SF	0	0
Rem. Math and Reading	1	868	SF	868	SF	0	0
AEA	1	143	SF	143	SF	0	0
Special Education							
Classroom	1	592	SF	592	SF	5	5
Classroom	1	855	SF	855	SF	10	10
Storage	1	60	SF	60	SF	0	0
Title	1	592	SF	592	SF	5	5
sub-total		**13433**	SF				
Arts							
2D/3D Art Classroom	1	1071	SF	1,071	SF	0	0
Art Storage	1	195	SF	195	SF	0	0
Music	1	1269	SF	1,269	SF	0	0
Storage	1	176	SF	176	SF	0	0
Practice	1	75	SF	75	SF	0	0
sub-total		**2786**	SF				
Media Center							
Library	1	1597	SF	1,597	SF	0	0
Computer Classroom	1	870	SF	870	SF	0	0
sub-total		**2467**	SF				
Food Service							
Cafeteria	1	1538	SF	1,538	SF	0	0
Kitchen	1	857	SF	857	SF	0	0
Wash	1	124	SF	124	SF	0	0
Cooler	1	71	SF	71	SF	0	0
Cart Room	1	165	SF	165	SF	0	0
Storage	1	295	SF	295	SF	0	0
Freezer	1	138	SF	138	SF	0	0
sub-total		**3188**	SF				
Physical Education							
Boys Locker Room	1	390	SF	390	SF	0	0
Boys Locker Room	1	461	SF	461	SF	0	0
Girls Locker Room	1	461	SF	461	SF	0	0
Girls Locker Room	1	390	SF	390	SF	0	0
Gym	1	6851	SF	6,851	SF	0	0
Stage	1	2045	SF	2,045	SF	0	0
Wrestling Room	1	1969	SF	1,969	SF	0	0
sub-total		**12567**	SF				
Administration, Misc							
School Office	1	297	SF	297	SF	0	0
Principal	1	217	SF	217	SF	0	0
Work Room	1	343	SF	343	SF	0	0
Work Room	1	140	SF	140	SF	0	0
Nurse	1	196	SF	196	SF	0	0
Nurse Toilet	1	39	SF	39	SF		
Aides	1	214	SF	214	SF	0	0
Aides Tlt	1	43	SF	43	SF		
Mail	1	43	SF	43	SF	0	0
Conference	1	379	SF	379	SF	0	0
Counselor	1	178	SF	178	SF	0	0
Storage	1	21	SF	21	SF	0	0
Kitchen	1	57	SF	57	SF	0	0
Custodian	1	112	SF	112	SF	0	0
Storage	1	133	SF	133	SF	0	0
Storage	3	636	SF	1,908	SF	0	0
Storage	1	106	SF	106	SF	0	0
Storage	1	145	SF	145	SF	0	0
Storage	1	387	SF	387	SF	0	0
Storage	1	170	SF	170	SF	0	0
sub-total		**3856**					
Designated Program Area				**44,151**			
Mechanical Areas	10%			4415.1			
Circulation/Restrooms	20%			8,830			
Building Services	5%			2207.55			
Total Building Area				**59,604**		**Core Capacity**	**404**

EDUCATIONAL SPECIFICATION

4.2.2 PROGRAMMING STANDARDS | JR/SR HIGH SCHOOL



EXISTING PROGRAMMING PLAN

4.2.2 PROGRAMMING STANDARDS | ELEMENTARY

EXISTING PROGRAMMING PLAN

MASTER PLANNING

5

5.1 OVERVIEW

The Master Plan is a comprehensive approach at a solution that addresses as many facility improvements as possible. These improvements could be part of a facility assessment that address code and accessibility requirements. They can also be building additions or renovations that could be spread out over a length of time. The Plan also addresses facility sizes and takes into account growth or reduction of a district. The Master Plan gives the Owners a long term goal of improvements or changes to focus on.

5.2 CREATIVE ENGAGEMENT PROCESS

The Creative Engagement Process for the Master Plan was made up of brainstorming, design charrettes and more research. The planning was done knowing that all projects could not be done at one time, but would be a road map to future opportunities. A road that can adjust as needs change. Additional questions were considered throughout the process.

- What are short term goals that "need" to be addressed?
- What are the long term goals?
- Are there programs that can't be offered because of lack of space?
- Are facilities the correct size?
- Do the facilities support 21st Century Learning?
- Can projects be phased?
- Will what we do now, create a stronger community?
- What is the right thing to do, not the safe thing?

5.3 THE MASTER PLAN | JR/SR HIGH SCHOOL SCHEME 1 - PICK-UP OPTION 1

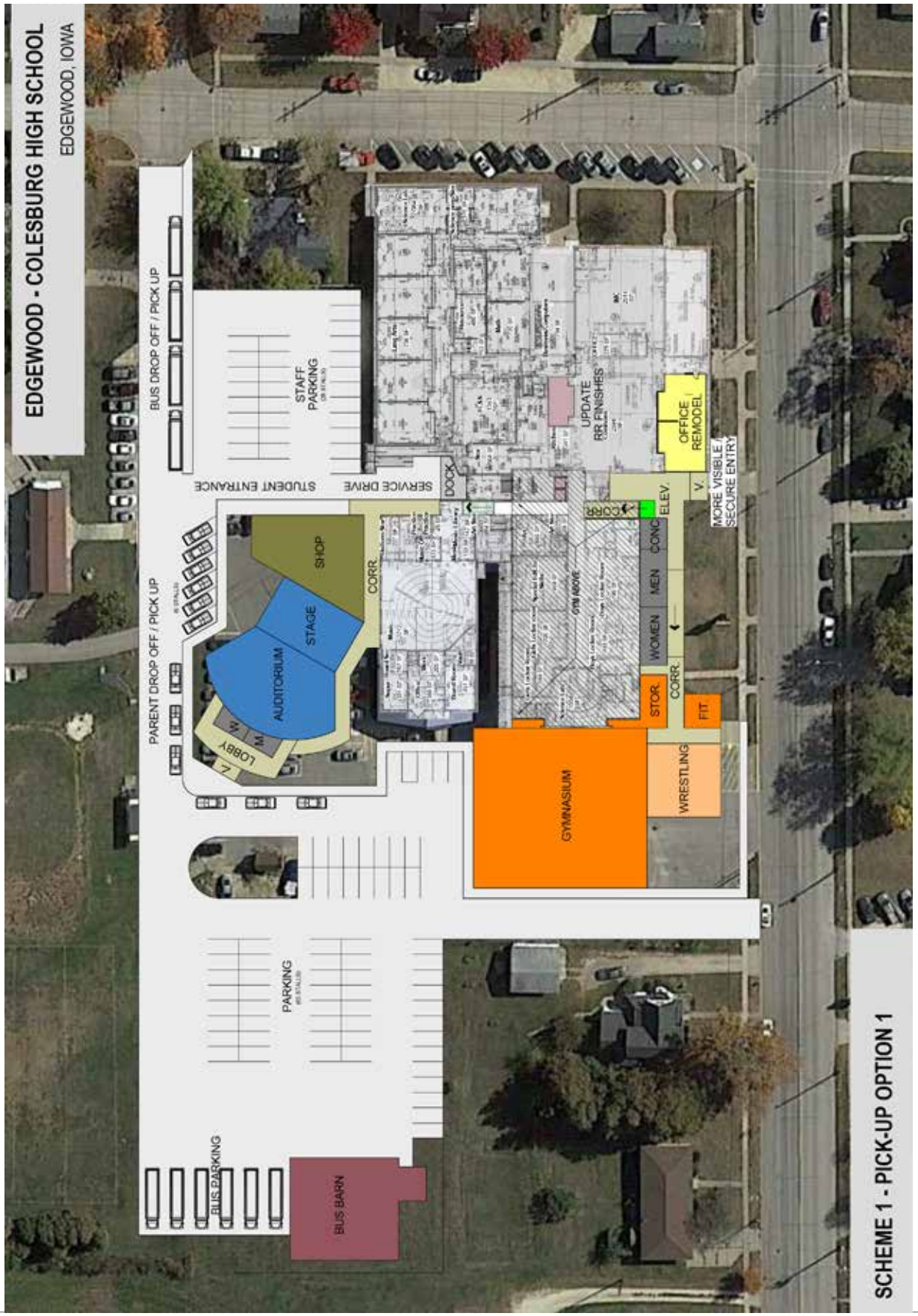
The Master Plan solution for Edgewood-Colesburg Community School District examines the above questions as well as the spaces required from the Program. Other items that were considered are:

Does the District have enough square footage in one community to consolidate to one location? Less facilities can save a tremendous amount of on-going and future cost for the District. However, in this case both sites are somewhat landlocked making consolidation to one site infeasible. Also, feedback from the stakeholders was clear in that they are adamant about keeping a school in both communities.

As we began looking at additions to the existing JR/SR High School we knew we needed to include the installation of an elevator to allow for accessibility to all areas of the building. We then began to ask, should the old gym and locker room / classroom space below be torn down and a new larger gym be constructed on a more level grade that would solve the accessibility issues within the existing building. Both of these options have advantages so we have included them both, as options in the final solution.

Scheme 1- Pick-up Option 1 includes the addition of a new larger competition gymnasium, mens/womens restrooms, storage, and a small exercise area. A wrestling room, and possible weight room, could also be accommodated at this location if needed/wanted. A new elevator will take the place of the existing ramp to get to the various levels of the building and a new corridor would be extended from the elevator to the existing corridor on the lower level. This also eliminates the need to go outside to get to some of the lower level spaces if you are not able to take the stairs. A new auditorium was added on the northwest corner of the building along with a new shop. The new shop/industrial space is adjacent to the stage and near the existing art room to allow for better collaboration between those spaces. The stage is accessible directly across the corridor from the music room and could double as additional music/chorus/band room. The auditorium seats 200 - 250 people, includes restrooms and a lobby area that can be accessed easily from the north west parking lot. The parking and drop off/pick up has been improved and enlarged along with a new bus facility. The front office has a couple options to make it secure from a safety stand point along with new signage. One option leaves the office in its current location and adds signage to make the entrance more identifiable and inviting. It also includes a little remodeling to create a secure entrance. The other option flips the entire office space so the main entrance is at the west end and is combined with the athletic entrance.

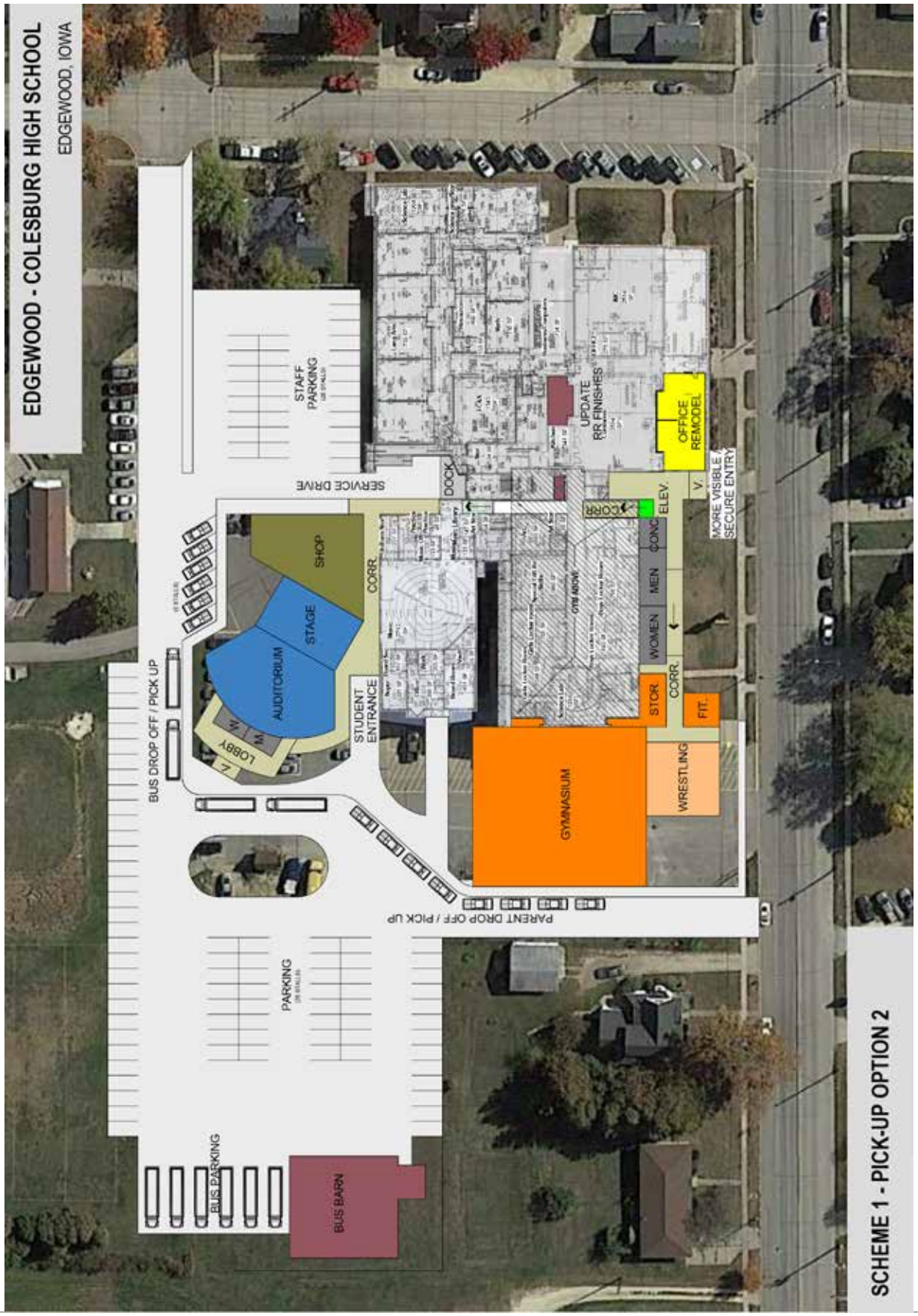
5.3 THE MASTER PLAN | JR/SR HIGH SCHOOL SCHEME 1 - PICK-UP OPTION 1



5.3 THE MASTER PLAN | JR/SR HIGH SCHOOL SCHEME 1 - PICK-UP OPTION 2

There is also a second arrangement for the drop-off/pick-up shown on **Scheme 1 - Pick-up Option 2** that incorporates a more common student entrance on the west side as opposed to the current student entrance location shown on the S**cheme 1 - Pick-up Option 1** at the ends of two corridors, near the service drive.

5.3 THE MASTER PLAN | JR/SR HIGH SCHOOL SCHEME 1 - PICK-UP OPTION 2



5.3 THE MASTER PLAN | JR/SR HIGH SCHOOL SCHEME 2

Scheme 2 includes tearing down the existing gymnasium and locker room / classroom space below. New locker rooms, gymnasium, storage, and restrooms would be added and the need for the elevator would be removed as it would be built at or near the floor elevation of the rest of the building with ramping included as needed. A few additional classroom spaces would be added to the east side of the school to replace the space that was lost in the lower level. An additional practice gym could be added along with a wresting, and possible weight room. The shop/ industrial tech and auditorium are located in the northwest corner, with a little different configuration from Option One. Eithershop/auditorium layout can be used with either scheme. Parking again has been improved with drop-off/pick-up and additional parking spaces along with the new bus facility. The front office has the same options as listed for Option One previously.

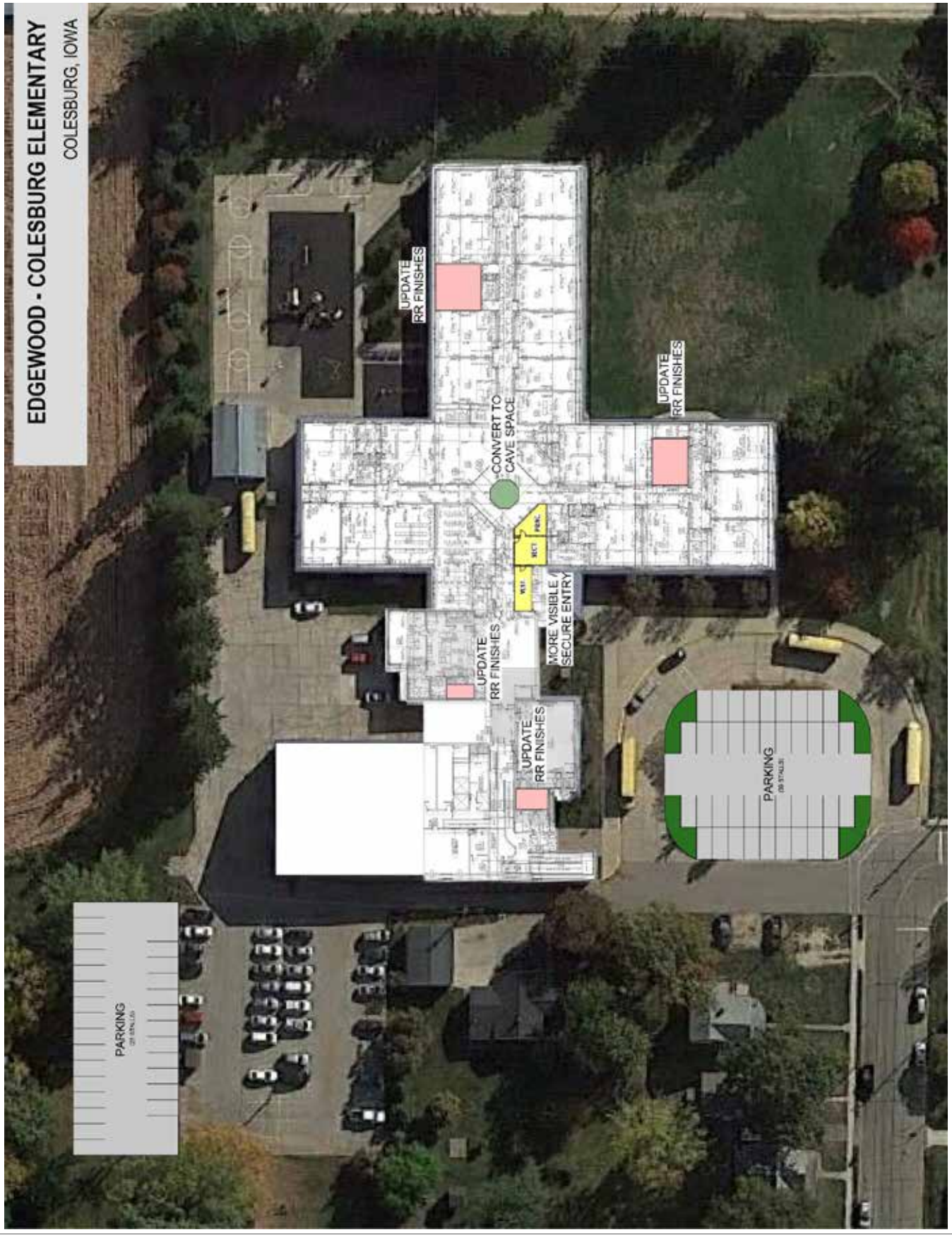
5.3 THE MASTER PLAN | JR/SR HIGH SCHOOL SCHEME 2

MASTER PLANNING

5.3 THE MASTER PLAN | ELEMENTARY SCHOOL

The elementary school improvements would include renovations to all restrooms, updating of HVAC, a secure entrance, some new finishes and corridor lockers. Further discussion can be had for simply replacing the lockers vs looking at a different type of storage for students. There are various locations throughout the school that we can start to implement 21st Century Learning Environments, which appeared to be in high demand from the students. The students mentioned using areas around the fish tanks for "cave spaces", or perhaps we could look at the storage rooms on the lower level, converting one or more of them to learning spaces. Another area the students were excited about was additional playground space, various ballfields and creating outdoor learning environments. These are areas we would want to explore more and work with administration to further develop. Reconfiguring the front parking lot, we are able to gain 26 additional spaces while adding additional parking to the north will create an additional 25 spaces for a total of 51 additional parking spaces. There is plenty of land to the north to expand parking even further if desired.

5.3 THE MASTER PLAN | ELEMENTARY SCHOOL



5.4 THE MASTER PLAN | FINAL SOLUTION EDGEWOOD-COLESBURG

The cost estimates are broken down into smaller projects so they can be combined or separated as desired to create phasing for a long term master plan solution.

It is clear that the community is a great support system for the school district and they want to sustain a school in each town. They want to be sure to maintain existing facilities while keeping the students safe and attracting teachers and students to the district. Thank you for allowing us to be a part of your study and we look forward to helping you sustain your school district for many years to come.

5.4 THE MASTER PLAN | FINAL SOLUTION COST ESTIMATE

Each of the projects noted on the list below have been assigned a construction cost. Due to the multitude of options and combinations of projects that could be completed at any one time, the construction contingency and design fees have been added to each item individually as if they were all being done separately. If projects are combined these fees would be slightly reduced. The list does not include all items listed in the cost index found under 2.4 of this report.

Edgewood-Colesburg CSD Master Plan Cost Estimates

StruXture Architects

Preliminary Cost Estimate **8/15/16**

	Unit	SF	Cost/ Sq Ft	Sub-Totals	Fees & Contingency	Totals
Jr/Sr High School Renovations/Additions						
Gym Scheme 1						
Gym Addition	14672	SF	$200.00	$2,934,400.00		
Elevator			-	$80,000.00		
Corridor Remodeling	300	SF	$100.00	$30,000.00		
					$380,600.00	
				Scheme 1 Total		**$3,425,000.00**
Gym Scheme 2						
Demo Original Gym / 2 Story Building	11782	SF	-	$350,000.00		
New Competition Gym / Locker Rooms	18350	SF	$200.00	$3,670,000.00		
New Classrooms	2550	SF	$200.00	$510,000.00		
					$560,000.00	
				Scheme 2 Total		**$5,090,000.00**
New Practice Gym	6300	SF	$200.00	$1,260,000.00	$165,000.00	**$1,425,000.00**
Wrestling Room (Either Scheme)	2270	SF	$200.00	$454,000.00	$71,500.00	**$525,500.00**
New Shop (Either Scheme)						
Shop Addition	4000	SF	$200.00	$800,000.00		
Dock Modifications			-	$20,000.00		
Demo Shop	7257	SF	-	$30,000.00		
					$120,000.00	
				Shop Total		**$970,000.00**
Auditorium Including Lobby/RR (Either Scheme)	8000	SF	$250.00	$2,000,000.00	$250,000.00	**$2,250,000.00**
New Bus Building	4000	SF	$150.00	$600,000.00	$88,275.00	**$688,275.00**
Demo Bus Building	2750	SF	-			**$15,000.00**
More Visible / Secure Entry (Current Location)	380	SF	$200.00	$76,000.00	$14,000.00	**$90,000.00**
More Visible / Secure Entry / Office Remodel	1500	SF	$125.00	$187,500.00	$33,000.00	**$220,500.00**
Parking / Drive	72568	SF	-	$600,000.00	$88,275.00	**$688,275.00**

Elementary School Renovations/Additions						
More Visible / Secure Entry	771	SF	$150.00	$115,650.00	$20,350.00	**$136,000.00**
Parking Lot (Front)	10680	SF	-	$85,000.00	$15,000.00	**$100,000.00**
Parking Lot (Back)	8640	SF	-	$70,000.00	$12,000.00	**$82,000.00**
Playground / Ballfields						***TBD**

The amounts stated herein are our best estimate of probable construction costs based on current information. Because costs are influenced by market conditions, changes in project scope, and other factors beyond our control, we cannot ensure that actual construction costs will equal this cost opinion. Fees and contingency are based on individual projects and will be slightly less if projects are combined.

* Estimates for expanded playground and/or ballfields is yet to be determined based on extent of work desired.