

September 6, 2018

Via E-Mail

Superintendent Kyle Ramey  
Oakwood City School District  
20 Rubicon Road  
Oakwood, Ohio 45409

Re: **Smith Elementary, Harman Elementary and Oakwood Junior/Senior High School** - 2/3 Waiver Request

Dear Superintendent:

Your letter dated **July 25, 2018** requested that your School District be allowed to retain **Smith Elementary, Harman Elementary and Oakwood Junior/Senior High School** as active school facilities in your master facilities plan, despite the fact that the renovate-to-replace cost ratio (Facility Condition Index (FCI)) is above **66%**. As you know, for any existing facility with an FCI in excess of **66%**, the Ohio Facilities Construction Commission (Commission) has a policy requiring a formal 'waiver' in order to retain that facility in the master facilities plan.

At the **September 4, 2018 Planning Meeting**, the Commission Planning Group granted your request for the aforementioned buildings. Enclosed please find the signed waiver. While this allows us to advance your desired revisions to the master facilities plan, I would like to draw your attention to the following:

- 1) The 'actual' ratio (identified as 'Right Ratio' on the master plan) of total project cost as compared to the cost of a new facility is **107% for the Smith Elementary, 91% for Harman Elementary and 80% for Oakwood Junior/Senior High School**, as currently planned in the revised master facilities plan. This is significant in that the Commission will only co-fund the cost of the project up to 100% of the cost of a new facility. **Any costs in excess of the 100% mark will be wholly the responsibility of the School District** (attached is a copy of the relevant section of Code).
- 2) Due to the limitation on state funding for renovations that exceed the cost of new construction, we recommend that you work with your selected architect to evaluate the financial risk of proceeding with the proposed renovation and consider providing an appropriate local contingency to manage your assessment of the potential financial risk of the project.
- 3) As of September 27, 2007, the Commission standard is LEED 'Silver' certification. Our experience is that it is not onerously difficult to achieve this requirement in renovated facilities; however, existing conditions do potentially limit some of the available 'GREEN' strategies necessary to accommodate the goal.

We recommend that you and your architect thoroughly review each of these considerations. Please contact me at 614/466-6290 or [melanie.drerup@ofcc.ohio.gov](mailto:melanie.drerup@ofcc.ohio.gov) should you need additional assistance.

Sincerely,



Melanie E. Drerup  
Chief of Planning

July 25, 2018

Dear Ohio Facilities Construction Commission,

As leaders of Oakwood Schools, we are officially requesting a waiver to keep our existing buildings, making renovations to the existing structures. We appreciate the opportunity to explain why.

Oakwood Schools embarked on a Master Facilities Plan process in the summer of 2017. The process started with existing facility assessments, followed by a Visioning and Options Phase. Various options were presented to the community during a number of public meetings. Seven final options were then explored, ranging from complete renovation to a combination of partial renovation and new construction.

After extensive community input and feedback, our community is willing to support the all renovation option, retaining the existing school buildings for continued educational use. Primary points that support the community's wishes include:

- Because Oakwood Schools do not provide busing, it is important to maintain walkable neighborhood schools
- Our English Tudor school buildings are the centerpiece of a community that values historic architecture
- The existing buildings are functional and well maintained, including renovations and improvements paid for by a \$20M community investment, which taxpayers are still paying for, in 2003.
- Oakwood Schools are currently near the top of the state in regards to educational performance. Community members do not see clear a value proposition between building replacement and educational outcomes. In a community that has comparatively high tax rates, funding new buildings does not appear to be politically viable.

In summary, our Master Facilities Plan process has confirmed the community's desire to keep the existing school buildings and use them for the foreseeable future.

We appreciate the OFCC's consideration of this waiver request.



Board of Education  
Todd T. Duwel, President  
Cassie M. Darr, Vice President  
Michael A. Miller  
Meredith Quigley  
John R. Wilson

Kyle B. Ramey, Ed.D, Superintendent  
Kevin S. Philo, Treasurer  
Allyson J. Couch, Director of Educational Services  
Kimbe L. Lange, Ed.D, Director of Curriculum, Instruction, Assessment  
Traci Hale, Community Relations Director  
Matt Sproat, Technology Coordinator

Paul Waller, Oakwood High School  
Tim Badenhop, Oakwood Junior High School  
Sarah Patterson, Harman School  
Lynn Cowell, Smith Elementary School  
Frank Eaton, Lange School and Supervisor of Special Education  
Laura Connor, Director of Athletics and Student Activities

## OFCC Planning Review Form

**School District:** Oakwood CSD (Montgomery) **Date:** 8/20/2018

**OFCC Program:** ELPP **Equity Rank:** FY18- 450

**Request:** District wants to keep and continue renovating Oakwood Junior/Senior High School versus abandoning/demolishing for new construction.

**CEFPI Rating:** The building was rated as Borderline (66%).

Existing buildings: 7-12 1062 178,238 67% 5 Acres

**Rationale:**

The building is a historic landmark in Oakwood; one which the school district as well as the community are committed to continuing to utilize. Since 2004, the district has spent \$10 million plus on building upgrades/additions. Also, the city is landlocked, so new construction would be very difficult.

**Written by:** Stephanie Kensler

☒ Approved.

*Stephanie Kensler*  
9/6/18

☐ Denied

# EVALUATION OF EXISTING FACILITY for 2/3RDS VARIANCE

School District: Oakwood CSD

Date Performed: June 6, 2018

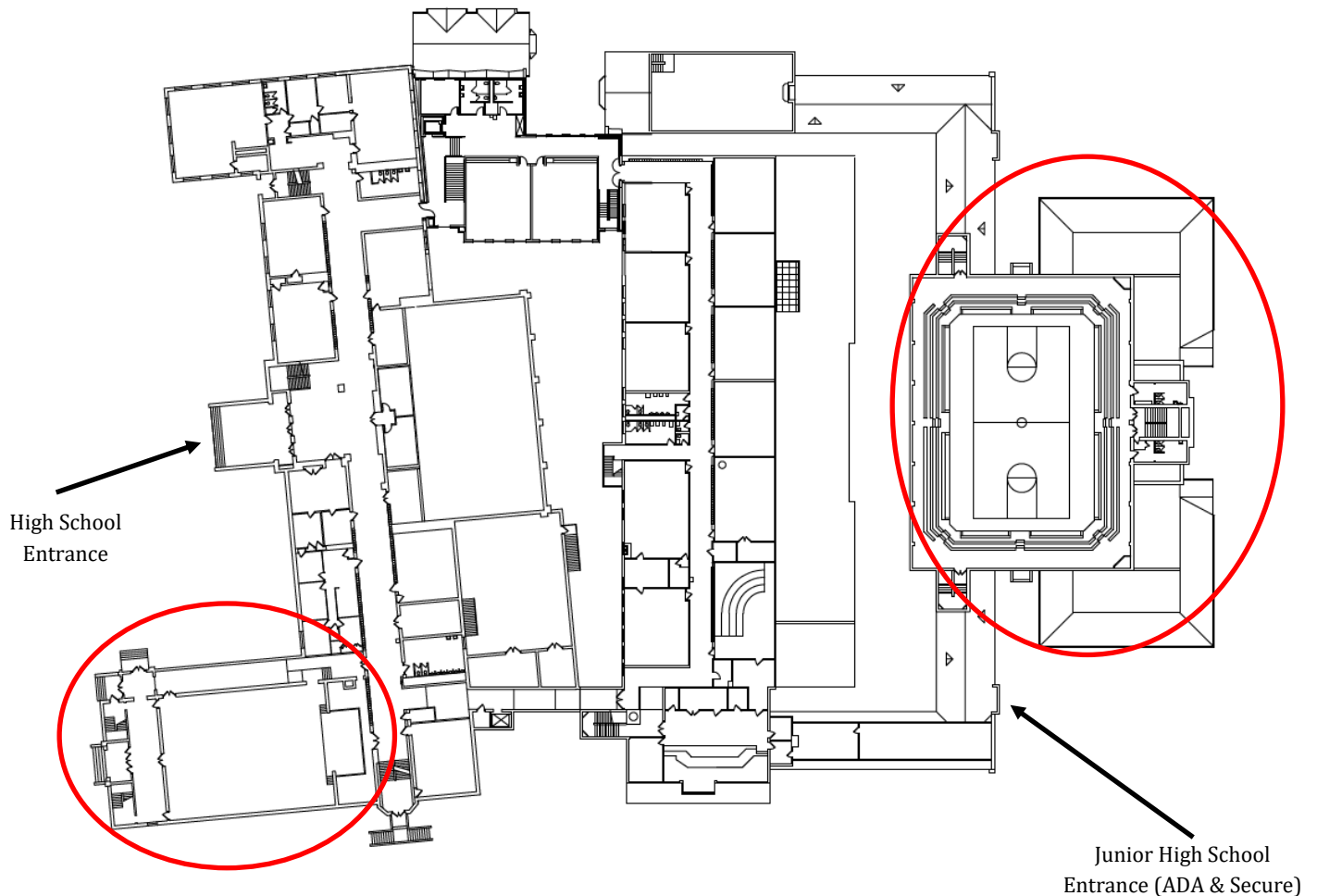
Reported By: Stephanie Kensler

## **Oakwood Junior/Senior High School:**

### **1. Adjacency of uses (Specifically, identify any uses or support spaces that should be relocated for functional reasons).**

Overall, the uses of the building are arranged appropriately. The spaces most likely to be accessed by the public are on the periphery and can be closed off from the rest of the building during events. Academic spaces are arranged in a variety of ways throughout the building- by grade/school, subject or both.

It would be ideal to have a secured/ADA entrance on the high school side of the building near their administrative offices.



2. **Means of Egress (Are the means of egress generally adequate; note instances of dead end corridors and corridors that are too narrow, and name any spaces that must exit through another occupied space).**

There are around 20 exterior doors (excluding those leading to the interior courtyard). There are no dead end corridors. Corridor widths throughout the building ranges from 8' to 14'. There is a secure entrance on the east side of the building into the Junior High office. There are few occurrences where one would exit through a potentially occupied space- some examples include the boy's and girl's locker rooms and classrooms with direct access to interior courtyards.

3. **Circulation (Is the circulation logical, flows well for use and egress, specifically identify any instances where circulation should be changed).**

Circulation seemed sufficient. Being a first time user of any facility, wayfinding could always be improved, but daily users seemed satisfied with layout and flow. It was easy to identify where we were by looking at the floor plans. Although technically, the Junior High is on the east side of the building and the High School is on the west, both schools share spaces throughout the building (i.e. science labs, library, cafeteria, etc.). Where appropriate there are separate spaces for Junior High and High School (i.e. art, engineering, etc.).

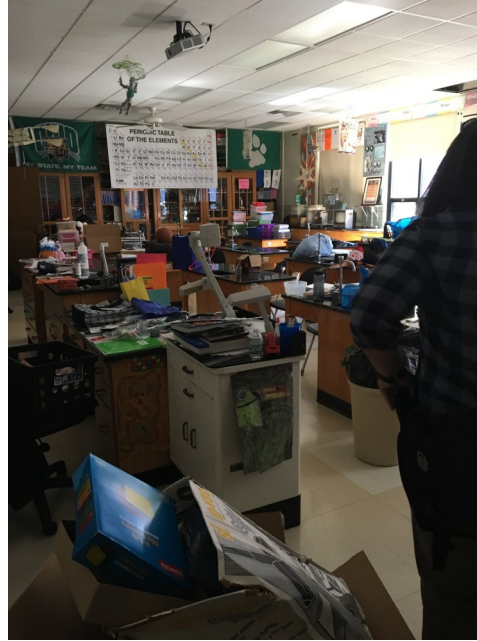
4. **ADA Door Alcoves (Do corridor walls require partial demolition in order to provide an alcove for ADA access? If so, provide a number of instances.)**

Some door alcoves would need to be adjusted to be ADA accessible. Throughout the building, there are a variety of door alcoves. The building does contain ADA restroom facilities as well as an elevator and an accessible stair by way of chair lift. Corridors are sufficiently wide enough for ADA accessibility.



5. **What is the size or range of sizes of a typical classroom? What is the typical number of students per classroom?**

Most classrooms are between 500 to 800 SF with a few larger outliers (1,000+ SF). Depending on the grade level and subject, classes can range in size from 25 to 30+ students.



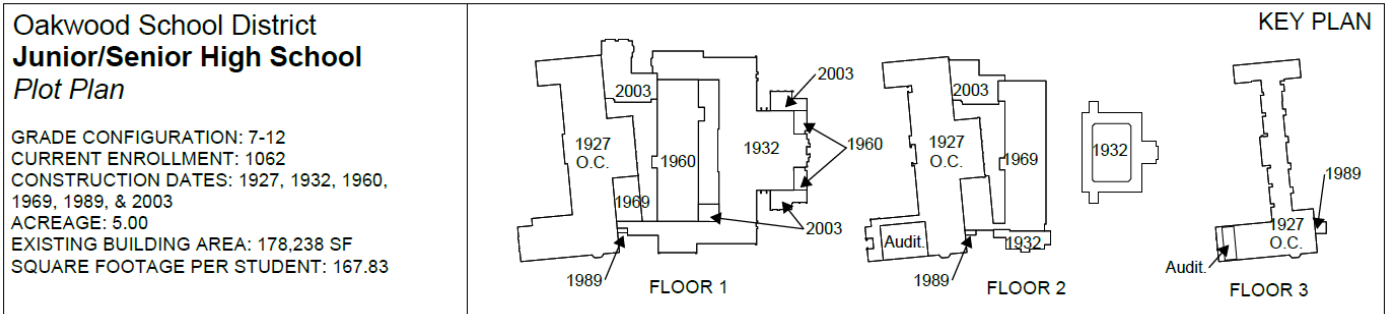
6. **Open Stairwells (Note the number of instances; note rooms which have doors off stair wells).**

Most stairs throughout the building are open.



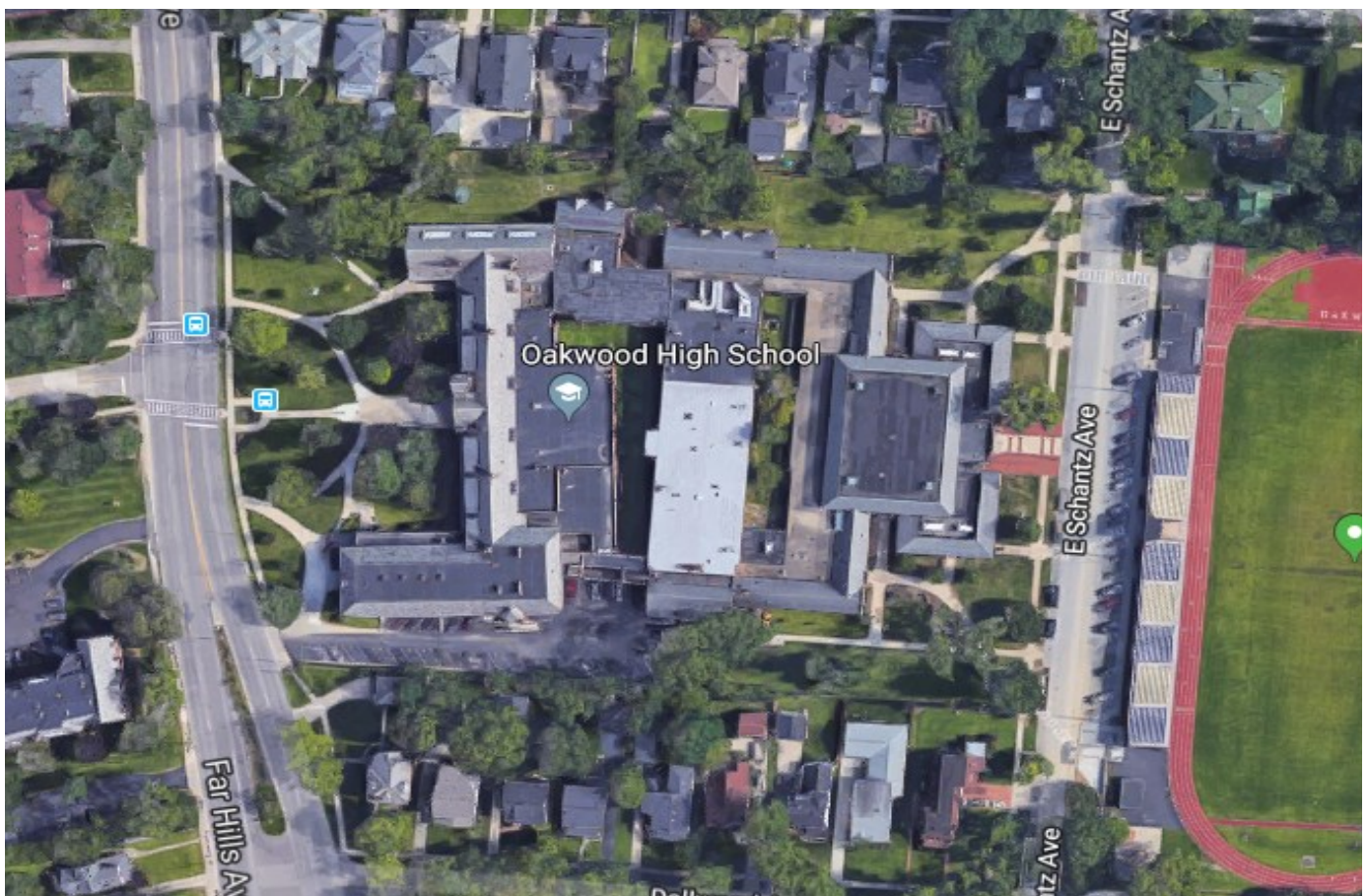
7. **Ease of expansion (Note if there is not an apparent solution to providing an addition to the building).**

The original 1927 construction has undergone a series of additions in 1932, 1960, 1969, 1989 and 2003. Opportunities for expansion are limited on the current site.



8. **Site conditions (Can a bus drop be accommodated? Can adequate parking and playground areas be created?).**

The district does not have bussing; therefore, a bus drop is not necessary at Oakwood Junior/Senior High School. There is limited parking along E. Schantz Avenue, primarily for staff. All students and visitors park along the streets of the neighborhood. Parents drop off at the street on E. Schantz Avenue. Playgrounds are not necessary at the Junior/Senior High School building.

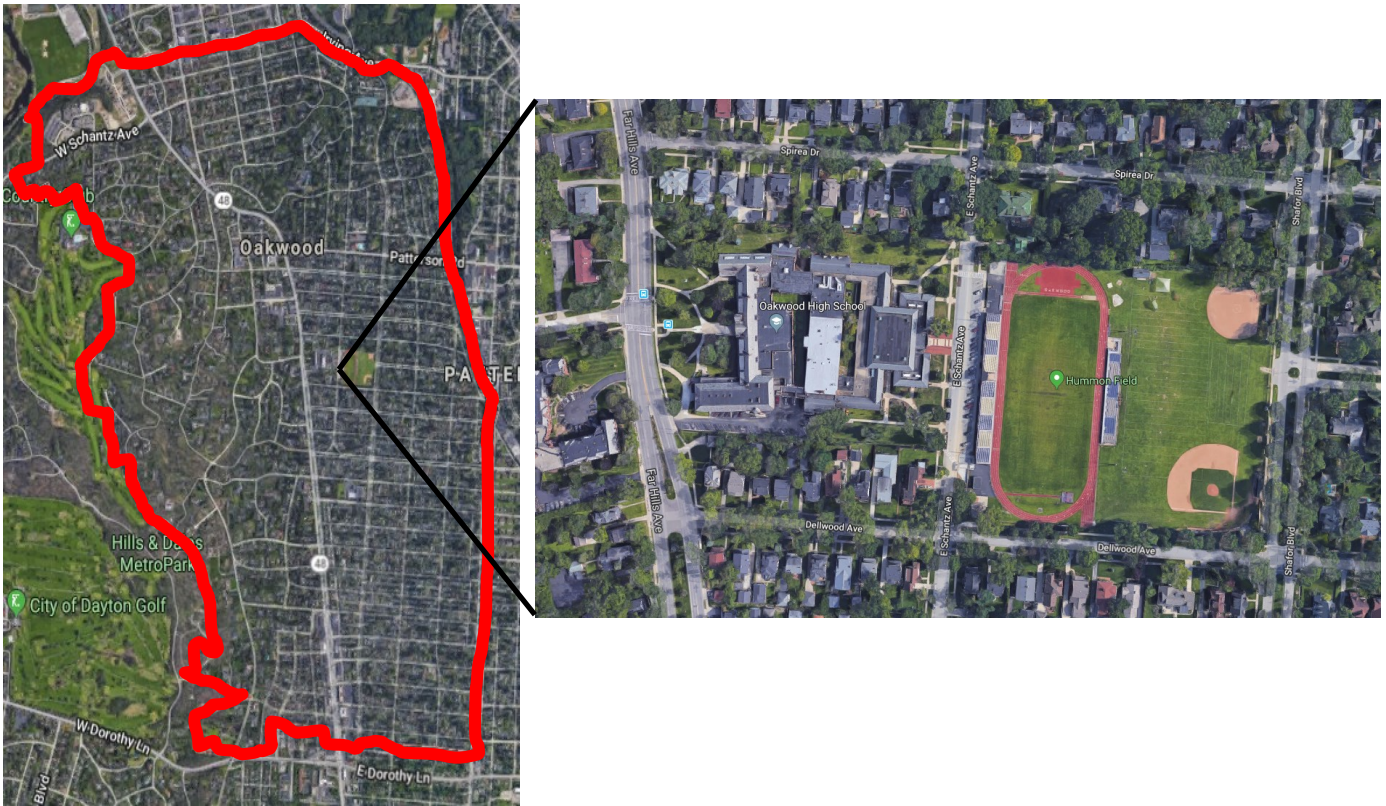


## General Response:

Oakwood Junior/Senior High School is a landmark in the Community. The historic facility is home to both a 500+ fixed seat, art deco auditorium as well as the iconic “Pit” gymnasium in addition to various other architectural significant elements.



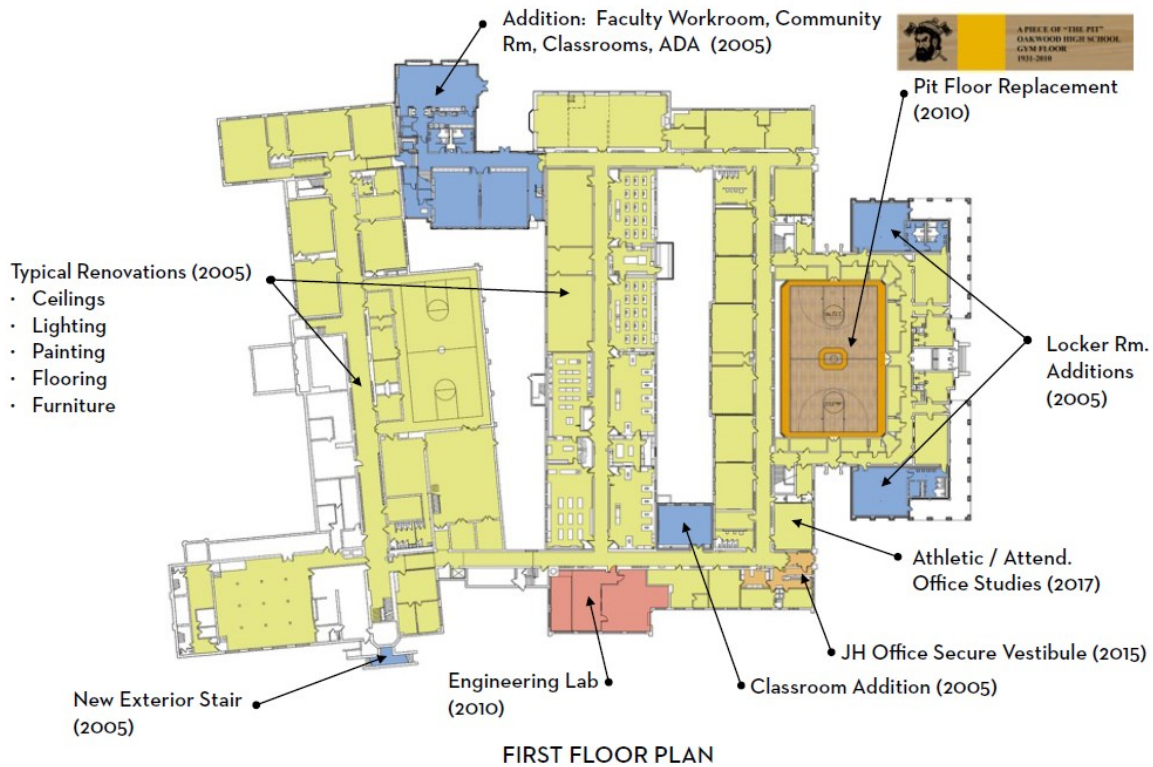
In addition to the cultural significance of the building, practically it would be very difficult for Oakwood City Schools to build a new building. The existing site is built out and land locked as is the rest of the neighborhood.



Some quirks of the building and district that would prove problematic for others works for Oakwood. For example, there is no space for a bus drop off, but the district does not have bussing so this is a non-issue. The cafeteria is small, but the district has open lunch so many of the students leave or eat elsewhere anyways.



Being an older building, there is room for improvement in areas such as ADA accessibility, security and energy efficiency, but the district has shown commitment to the building and has made improvements in these areas over the years. The building has undergone a myriad of additions to expand and adapt. The district continues to invest in the school, having spent roughly 10 million dollars since 2005.



- Typical Renovations (2005)
- Ceilings, Lighting, Painting
  - Flooring, Furniture



THIRD FLOOR PLAN

Despite its challenges being an older building, it does support progressive planning philosophy such as being walkable, containing maker spaces, movable walls, outdoor learning space and teacher workstation/collaboration space outside of the classroom. Additionally, there is opportunity to take advantage of large corridor spaces for Extended Learning Areas.



After reviewing the condition assessment for Oakwood Junior/Senior High School and participating in a walkthrough of the building, it is my recommendation that a 2/3 waiver be granted for the facility.

## OFCC Planning Review Form

**School District:** Oakwood CSD (Montgomery) **Date:** 8/20/2018

**OFCC Program:** ELPP **Equity Rank:** FY18- 450

**Request:**  
District wants to keep and continue renovating Harman Elementary School versus abandoning/demolishing for new construction.

**CEFPI Rating:**  
The building was rated as Borderline (61%).

Existing buildings: 1-6 452 70,084 85% 2.2 Acres

**Rationale:**  
The building is a historic landmark in Oakwood; one which the school district as well as the community are committed to continuing to utilize. Since 2004, the district has spent \$5 million plus on building upgrades/additions. Also, the city is landlocked, so new construction would be very difficult.

**Written by:** Stephanie Kensler

☒ **Approved**  
*Melanie E. Denny*  
9/6/18

☐ **Denied**

## EVALUATION OF EXISTING FACILITY for 2/3RDS VARIANCE

School District: Oakwood CSD

Date Performed: June 6, 2018

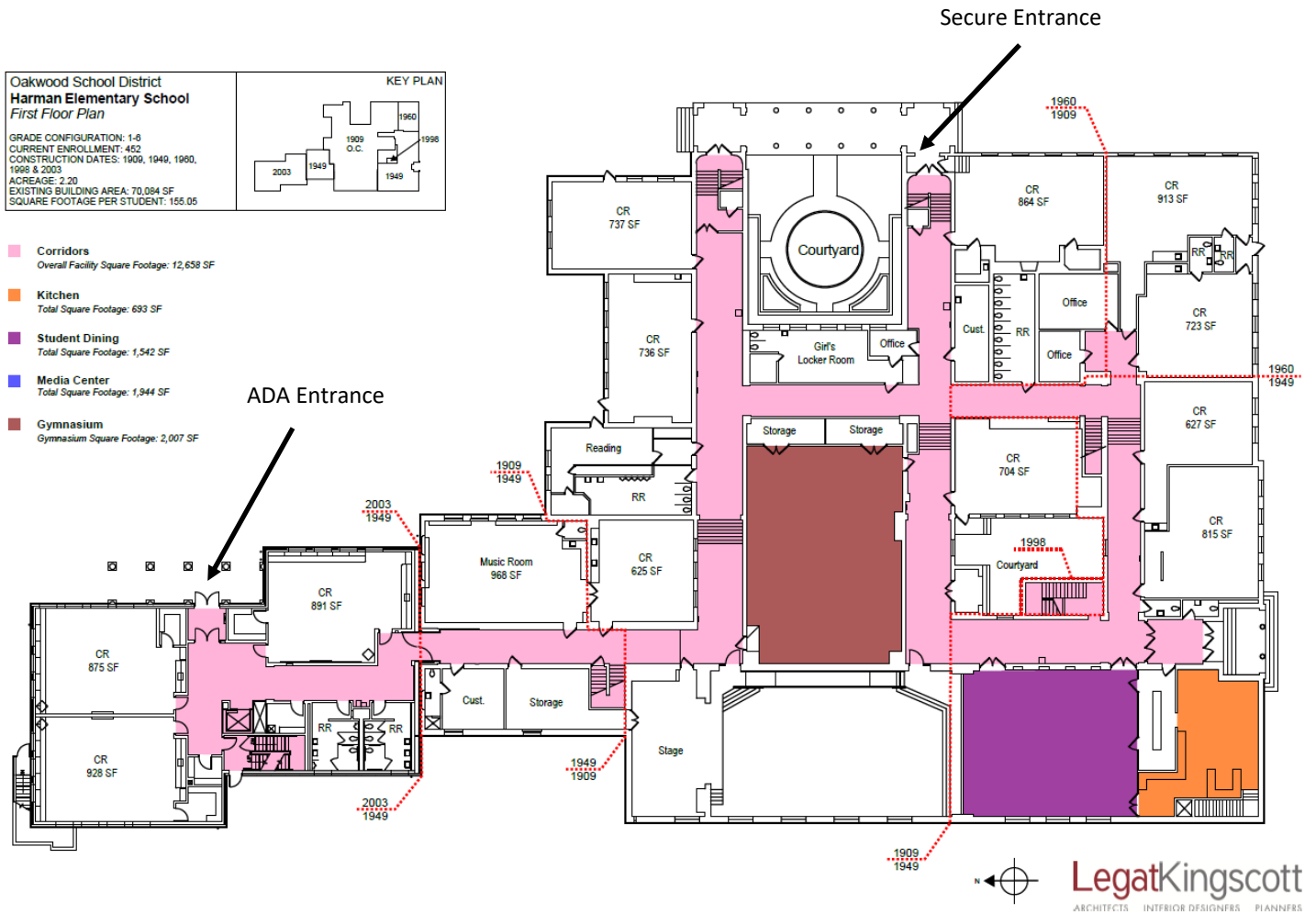
Reported By: Stephanie Kensler

### Harman Elementary School:

**1. Adjacency of uses (Specifically, identify any uses or support spaces that should be relocated for functional reasons).**

Overall, the uses of the building are arranged appropriately. Academic spaces are primarily organized by grade level. Most of the “specials” (art, music, gym) are centrally located.

The building does have a secure entrance, but it is not ADA. As such, visitors needing to get to the office, would be required to go through the building by way of the 2003 addition.



2. **Means of Egress (Are the means of egress generally adequate; note instances of dead end corridors and corridors that are too narrow, and name any spaces that must exit through another occupied space).**

There are around 10 exterior doors. There are no dead end corridors. Corridor widths throughout the building were about 8' to 12'. There is a secure entrance on the east side of the building into the office. The only occurrences where one would exit through a potentially occupied space would be a few classrooms and the reading room on the 1st floor.

3. **Circulation (Is the circulation logical, flows well for use and egress, specifically identify any instances where circulation should be changed).**

Daily users seemed satisfied with layout and flow. ADA circulation for visitors and wayfinding could be improved.

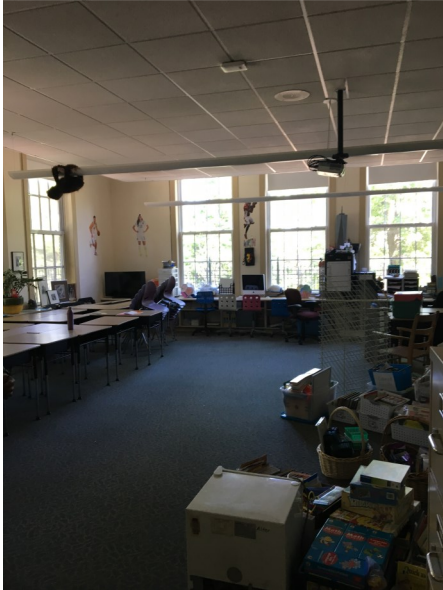
4. **ADA Door Alcoves (Do corridor walls require partial demolition in order to provide an alcove for ADA access? If so, provide a number of instances.)**

Some door alcoves may need to be adjusted for ADA, but most doors are flush with corridor walls. There is a ramp in the gym immediately inside the door that should be adjusted for ADA. The building does contain ADA restroom facilities as well as an elevator and an accessible stair by way of chair lift. Corridors are sufficiently wide enough for ADA accessibility.



**5. What is the size or range of sizes of a typical classroom? What is the typical number of students per classroom?**

Typical classrooms are between 700 and 800 SF with a few outliers both larger (900+ SF) and smaller (547 SF). Average class size is approximately 25 students. Only 1 classroom has no exterior windows (it does have windows to the hallway). The gymnasium also does not have any doors or windows to the exterior of the building.



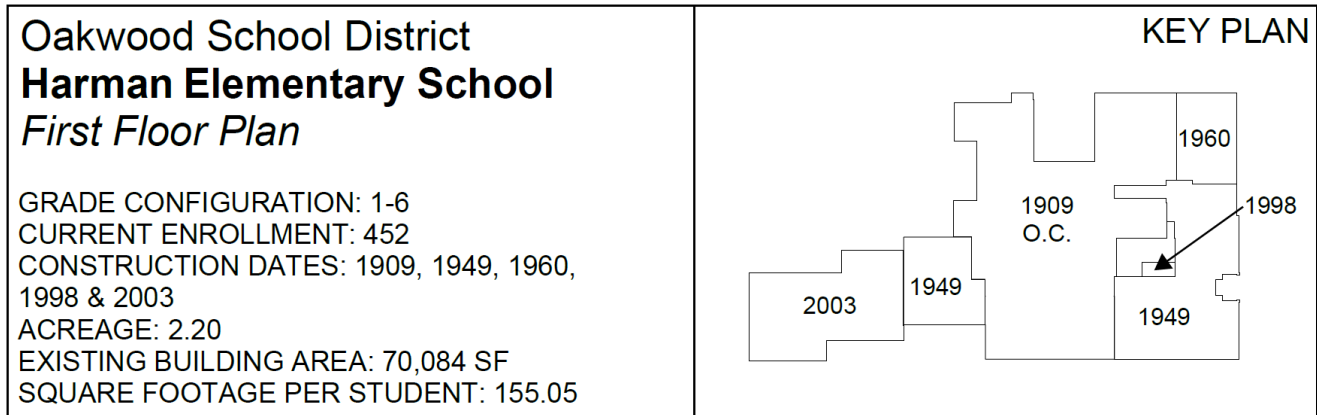
**6. Open Stairwells (Note the number of instances; note rooms which have doors off stairwells).**

Most stairs throughout the building are open.



7. **Ease of expansion (Note if there is not an apparent solution to providing an addition to the building).**

The original 1909 construction has undergone a series of additions in 1949, 1960, 1998 and 2003. Opportunities for expansion are limited on the current site.



8. **Site conditions (Can a bus drop be accommodated? Can adequate parking and playground areas be created?).**

The district does not have bussing; therefore, a bus drop is not necessary at Harman Elementary School. There is limited parking north of the building for staff. All visitors park along the streets of the neighborhood. Parents drop off at the street on Harman Avenue. There is a soft playgrounds to the north of the building. The hard surface play area is to the east and northeast of the building.

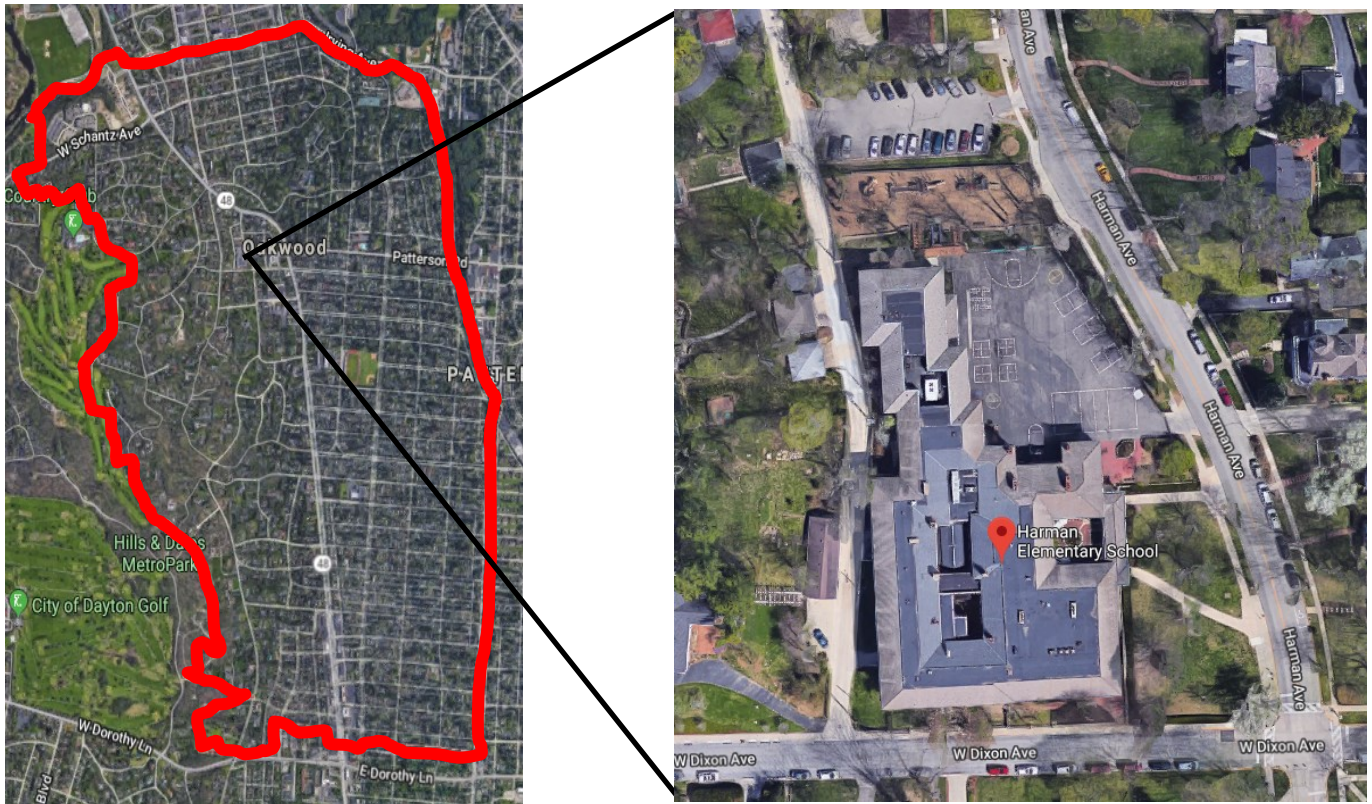


## General Response:

Harman Elementary School is a landmark in the Community. The historic facility boasts a variety of architecturally significant elements.

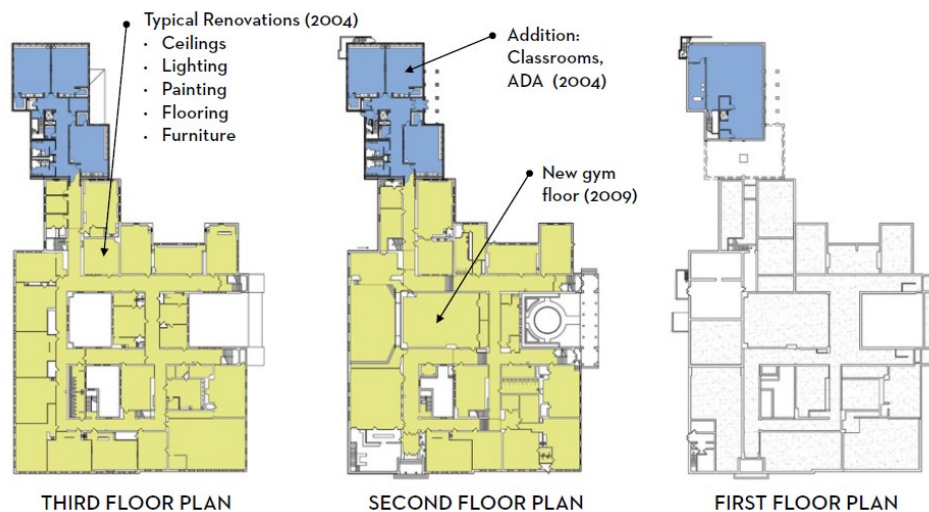


In addition to the cultural significance of the building, practically it would be very difficult for Oakwood City Schools to build a new building. The existing site is built out and land locked as is the rest of the neighborhood.



Some quirks of the building and district that would prove problematic for others works for Oakwood. For example, there is no space for a bus drop off, but the district does not have bussing so this is a non-issue. The cafeteria is small, but the district has open lunch so between students leaving and staggering lunch times, it works.

Being an older building, there is room for improvement in areas such as ADA accessibility, security and energy efficiency, but the district has shown commitment to the building and has made improvements in these areas over the years. The building has undergone a myriad of additions to expand and adapt. The district continues to invest in the school, having spent roughly 5 million dollars since 2004.



Despite its challenges being an older building, it does support progressive planning philosophy such as being walkable, incorporating movable walls and flexible furniture. Additionally, there is opportunity to take advantage of large corridor spaces for Extended Learning Areas.



After reviewing the condition assessment for Harman Elementary School and participating in a walkthrough of the building, it is my recommendation that a 2/3 waiver be granted for the facility.

## OFCC Planning Review Form

**School District:** Oakwood CSD (Montgomery) **Date:** 8/20/2018

**OFCC Program:** ELPP **Equity Rank:** FY18- 450

**Request:** District wants to keep and continue renovating Smith Elementary School versus abandoning/demolishing for new construction.

**CEFPI Rating:** The building was rated as Borderline (61%).

Existing buildings: PK; 1-6 458 85,563 83% 3 Acres

**Rationale:** The building is a historic landmark in Oakwood; one which the school district as well as the community are committed to continuing to utilize. Since 2004, the district has spent \$5 million plus on building upgrades/additions. Also, the city is landlocked, so new construction would be very difficult.

**Written by:** Stephanie Kensler

☒ **Approved.**  
*Melanie E. Dwyer*  
9/6/18

☐ **Denied**

# EVALUATION OF EXISTING FACILITY for 2/3RDS VARIANCE

School District: Oakwood CSD

Date Performed: June 6, 2018

Reported By: Stephanie Kensler

## Smith Elementary School:

### 1. Adjacency of uses (Specifically, identify any uses or support spaces that should be relocated for functional reasons).

Overall, the uses of the building are arranged appropriately. The space most likely to be accessed by the public, the gymnasium— where junior high sports are played, is on the periphery and can be closed off from the rest of the building during events. Academic spaces are primarily organized by grade level. The school has a very large library/computer lab that is centrally located.

The building does have a secure entrance, but it is not ADA. As such, visitors needing to get to the office, would be required to go through the building by way of either the addition (elevator) or the gym area (stair lift).



**2. Means of Egress (Are the means of egress generally adequate; note instances of dead end corridors and corridors that are too narrow, and name any spaces that must exit through another occupied space).**

There are around 12 exterior doors. There are no dead end corridors. Corridor widths throughout the building were about 6' to 10'. There is a secure entrance on the east side of the building into the office. The only occurrence where one would exit through a potentially occupied space would be the gymnasium.

**3. Circulation (Is the circulation logical, flows well for use and egress, specifically identify any instances where circulation should be changed).**

Circulation seemed sufficient. Being a first time user of any facility, wayfinding could always be improved, but daily users seemed satisfied with layout and flow. It was easy to identify where we were by looking at the floor plans even though the building does contain partial levels. ADA circulation for visitors could be improved.

**4. ADA Door Alcoves (Do corridor walls require partial demolition in order to provide an alcove for ADA access? If so, provide a number of instances.)**

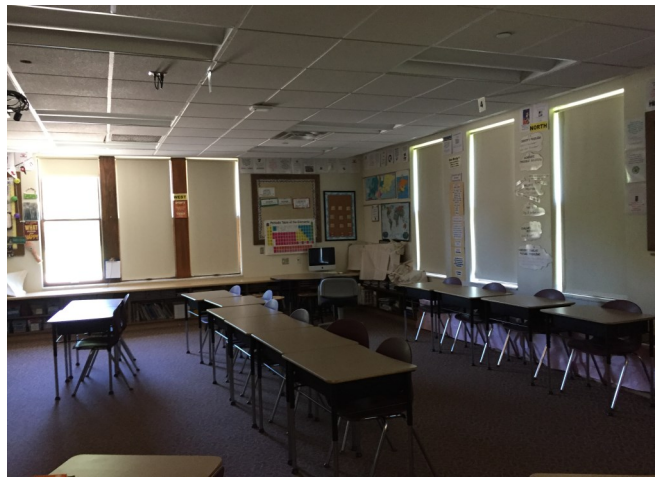
Some door alcoves would need to be adjusted to be ADA accessible. Throughout the building, there are a variety of door alcoves. Building does contain ADA restroom facilities as well as an elevator and an accessible stair by way of chair lift. Corridors are sufficiently wide enough for ADA accessibility.



5. **What is the size or range of sizes of a typical classroom? What is the typical number of students per classroom?**

Classrooms range from 500 to 800 SF with a few outliers both larger (1,000+ SF) and smaller (250 SF). Average class size is approximately 25 students. Only 1 classroom has no windows (PK), but connects to another classroom that does have windows.

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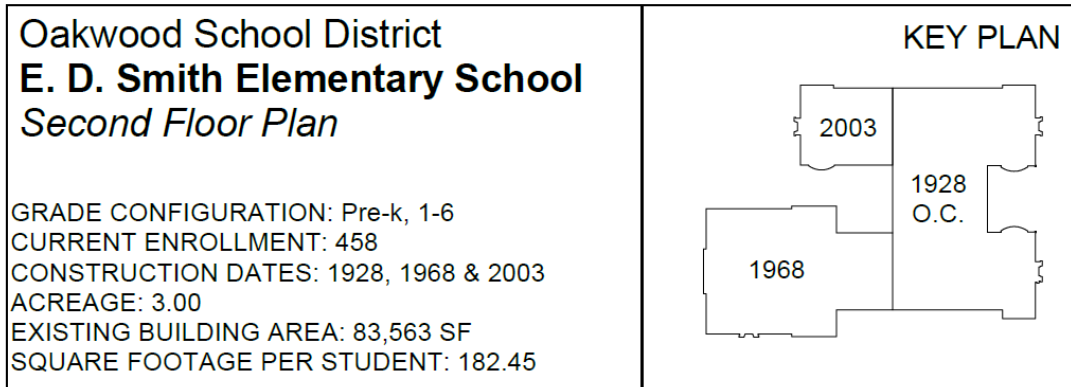
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Most stairs throughout the building are open.



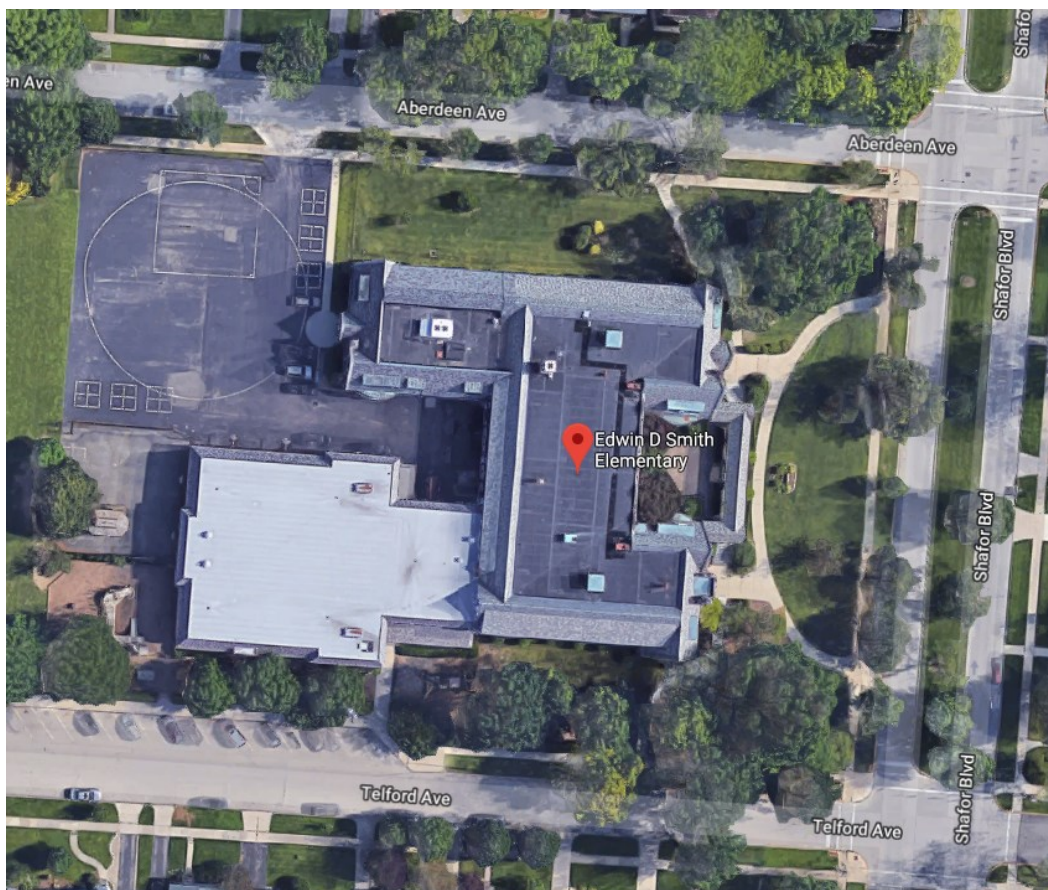
7. **Ease of expansion (Note if there is not an apparent solution to providing an addition to the building).**

The original 1928 construction has undergone a series of additions in 1968 and 2003. Opportunities for expansion are limited on the current site.



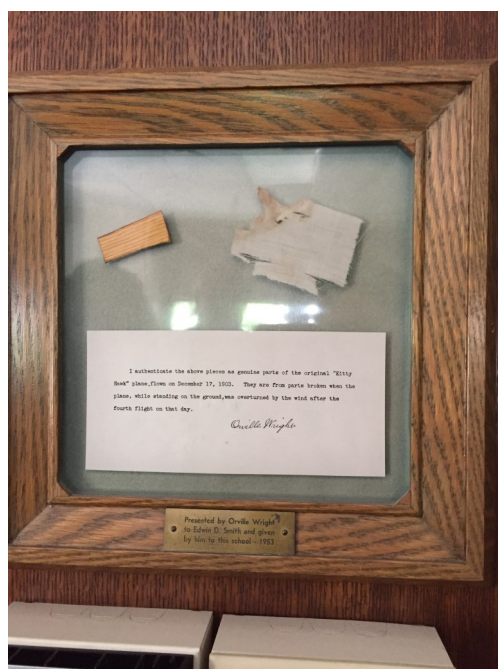
8. **Site conditions (Can a bus drop be accommodated? Can adequate parking and playground areas be created?).**

The district does not have bussing; therefore, a bus drop is not necessary at Smith Elementary School. There is limited parking along Telford Avenue, primarily for staff. All visitors park along the streets of the neighborhood. Parents drop off at the street on Shafor Boulevard. There are small soft playgrounds to the south and southwest of the building. The hard surface play area is to the west and northwest of the building. There is also a city park adjoining the site the school occasionally uses .

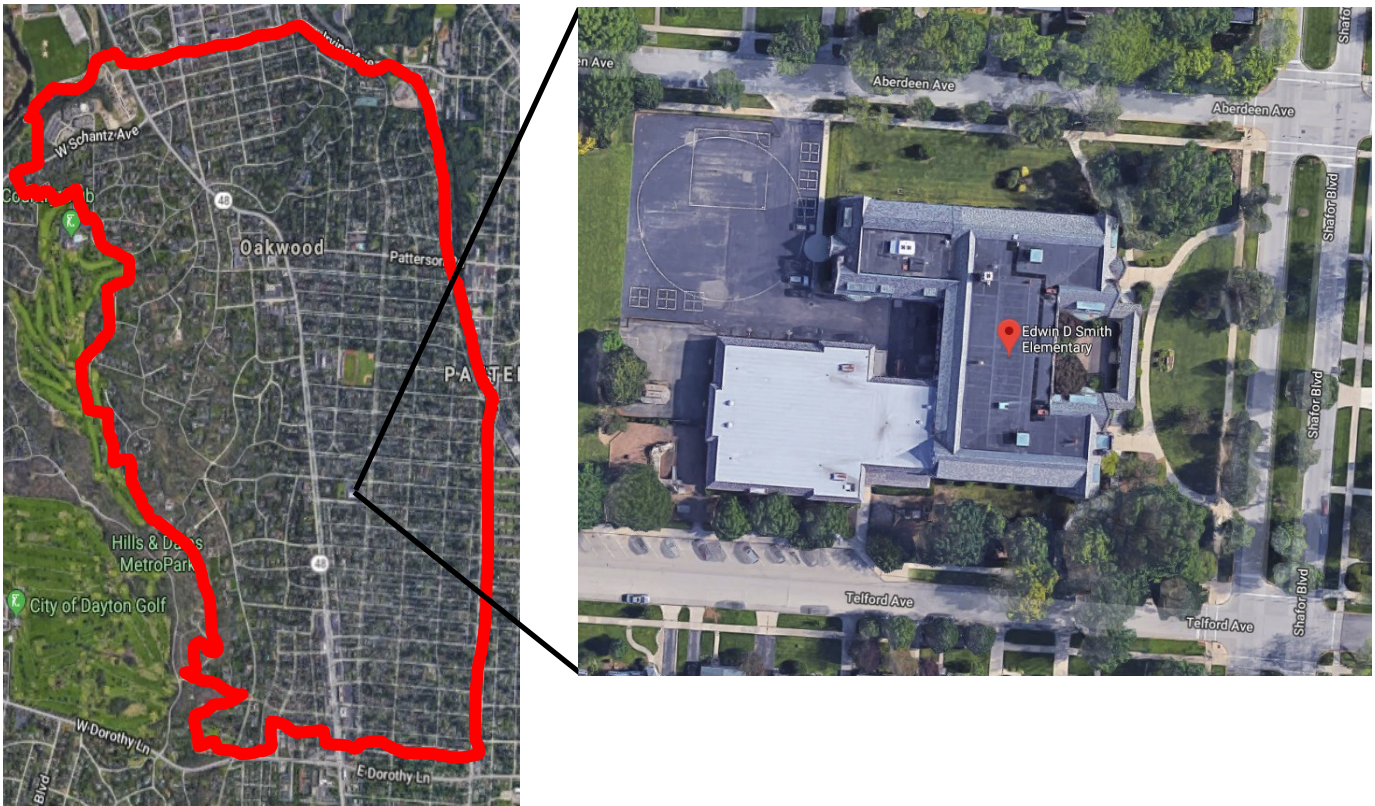


## General Response:

Smith Elementary School is a landmark in the Community. The historic facility boasts a variety of architecturally significant elements.



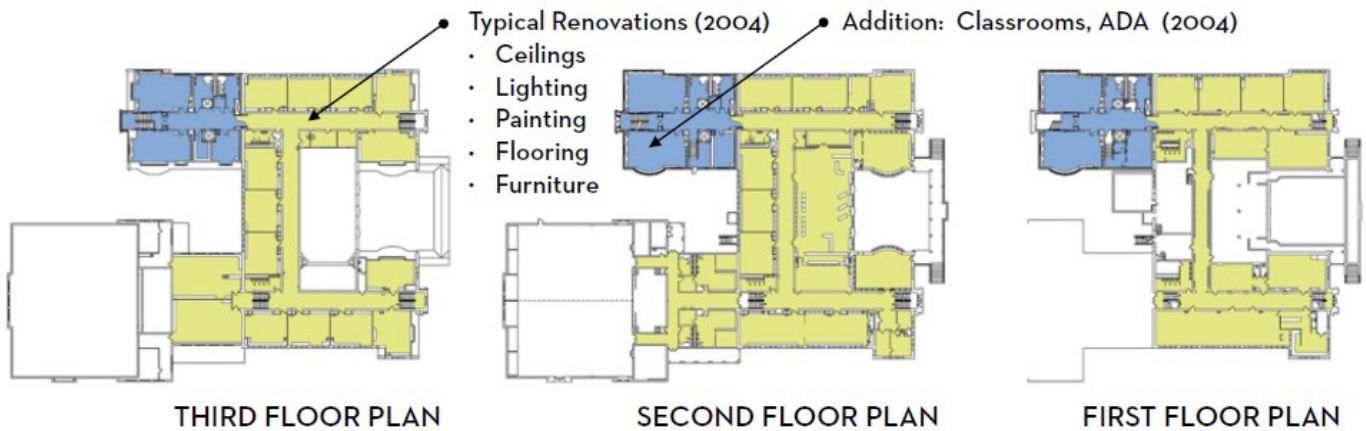
In addition to the cultural significance of the building, practically it would be very difficult for Oakwood City Schools to build a new building. The existing site is built out and land locked as is the rest of the neighborhood.



Some quirks of the building and district that would prove problematic for others works for Oakwood. For example, there is no space for a bus drop off, but the district does not have bussing so this is a non-issue. The cafeteria is small, but the district has open lunch so between students leaving and staggering lunch times, it works.



Being an older building, there is room for improvement in areas such as ADA accessibility, security and energy efficiency, but the district has shown commitment to the building and has made improvements in these areas over the years. The building has undergone a myriad of additions to expand and adapt. The district continues to invest in the school, having spent roughly 5 million dollars since 2004.



Despite its challenges being an older building, it does support progressive planning philosophy such as being walkable and incorporating movable walls. Additionally, there is opportunity to take advantage of large corridor spaces for Extended Learning Areas.



After reviewing the condition assessment for Smith Elementary School and participating in a walkthrough of the building, it is my recommendation that a 2/3 waiver be granted for the facility.

Master Plan Name Oakwood City SD (Montgomery) - ELPP MP #A-1 - DRAFT  
 Program CFAP 2015-08-18 (Active)  
 Rank 450  
 School District Oakwood City School District  
 School District IRN 44586  
 County Montgomery County  
 Cost Region 2 (New Construction Cost Factor: 98.97%)  
 Cost Set 2018  
 Bracketing Set 2018  
 Educational PlannerFutureThink

Projected Enrollment (10 Yr)

Grade	2021-2022	Grade Configurations			
PK	29	Grades	Total	Placed	Remaining
K	123	PK-12	1945	1945	0
1	145	PK-5	866	866	0
2	123	6-8	446	446	0
3	138	9-12	633	633	0
4	130	PK-8	1312	1312	0
5	178	6-12	1079	1079	0
6	147	CT	44	44	0
7	136				
8	163				
9	160				
10	166				
11	153				
12	154				
CT Offsite	44				
CT Low Bay Comprehensive	0				
CT High Bay Comprehensive	0				
CT Low Bay Onsite	0				
CT High Bay Onsite	0				
<b>Total</b>	<b>1989</b>				

Project Scope:

Abandon Lange School (2/3 Guideline).  
 Renovations to Edwin D. Smith Elementary to house grades PK-6.  
 Renovations to Harman Elementary to house grades 1-6.  
 Renovations to Oakwood Jr. / Sr. High to house grades 7-12 plus Career Tech.

Master Planner Commentary:

The project budget for new buildings or building additions shown on this plan anticipates attaining the USGBC LEED For Schools (U.S. Green Building Council, Leadership in Energy and Environmental Design) Silver certification (with a preference for attaining points in the Energy and Atmosphere category).

Building	Allowance	
Oakwood Jr./Sr. High	LEED Allowance for building renovation	\$634,823.42
Oakwood Jr./Sr. High	Storm Shelter allowance (hardening 6,702 SF)	\$623,523.98
Edwin D Smith Elem	LEED Allowance for building renovation	\$288,783.07
Edwin D Smith Elem	Storm Shelter allowance (hardening 3,625 SF)	\$355,436.18
Harman Elem	LEED Allowance for building renovation	\$242,201.37
Harman Elem	Storm Shelter allowance (hardening 3,619 SF)	\$354,911.33

Building Program	<u>Lange School</u> <u>Master Planning Considerations</u>	<u>Oakwood Jr./Sr. High</u> <u>Master Planning Considerations</u>	<u>Edwin D Smith Elem</u> <u>Master Planning Considerations</u>	<u>Harman Elem</u> <u>Master Planning Considerations</u>
Cost Set	Expedited Local Partnership Program (ELPP) 2018	Expedited Local Partnership Program (ELPP) 2018	Expedited Local Partnership Program (ELPP) 2018	Expedited Local Partnership Program (ELPP) 2018
Assessing Consultant	Resource International, Inc.	Resource International, Inc.	Resource International, Inc.	Resource International, Inc.
Type	Elementary	Middle/High	Elementary/Middle	Elementary/Middle
Acres	1.60	5.00	3.00	2.20
Grades Housed	K	7-12	PK, 1-6	1-6
Current Enrollment	135	1062	458	452
Additions to Demolish	<input type="checkbox"/> 1940 Original Construction 68% 16,330 ft²	<input type="checkbox"/> 1927 Auditorium Fixed Seating 75% 4,706 ft² <input type="checkbox"/> 1927 Original Construction 74% 76,823 ft² <input type="checkbox"/> 1932 Addition 1 59% 44,332 ft² <input type="checkbox"/> 1960 Addition 2 51% 15,790 ft² <input type="checkbox"/> 1969 Addition 3 49% 21,881 ft² <input type="checkbox"/> 1989 Addition 4 45% 550 ft² <input type="checkbox"/> 2003 Addition 5 47% 14,156 ft²	<input type="checkbox"/> 1928 Original Construction 89% 54,713 ft² <input type="checkbox"/> 1968 Gymnasium Addition 64% 16,244 ft² <input type="checkbox"/> 2003 Classroom Addition 50% 12,606 ft²	<input type="checkbox"/> 1909 Original Construction 97% 32,931 ft² <input type="checkbox"/> 1949 Classroom Addition 66% 18,739 ft² <input type="checkbox"/> 1960 Classroom Addition 65% 4,170 ft² <input type="checkbox"/> 1998 Stairwell Addition 43% 366 ft² <input type="checkbox"/> 2003 Classroom Addition 50% 13,878 ft²
Grades Housed - Proposed		7-12, CT Offsite	PK-6	1-6
Projected Enrollment		932	507	506
CT Projected Enrollment		44		
Scope of Work	Abandon	Renovate	Renovate	Renovate
CEFPI Rating	Borderline	Borderline	Borderline	Borderline
Existing ft²	16,330	178,238	83,563	70,084
Cost/ft² (DM)	\$253.50	\$241.06	\$233.90	\$233.90
Cost to Replace	\$4,139,655.00	\$42,966,052.28	\$19,545,385.70	\$16,392,647.60
Cost to Renovate	\$2,808,900.46	\$28,544,206.62	\$16,115,402.18	\$13,652,186.16
Reprogramming	\$0.00	\$362,886.97	\$182,764.94	\$224,077.21
Renovate+Replace	68%	67%	83%	85%
Right Replacement		\$36,358,596.51	\$15,198,107.81	\$15,167,872.05
Right Ratio		80%	107%	91%
Addition Required	No	No	No	No
	<b>Addition ft²</b>	<b>Addition ft²</b>	<b>Addition ft²</b>	<b>Addition ft²</b>
Proposed Enrollment	Students sf/Student sf required	Students sf/Student sf required	Students sf/Student sf required	Students sf/Student sf required
Elementary (PK-K)	x = 0	x = 0	152 x 119.05 = 18,096	x = 0
Elementary (PK-5)	x = 0	x = 0	433 x 119.05 = 51,549	433 x 119.09 = 51,566
Middle (6-8)	x = 0	299 x 148.65 = 44,446	74 x 147.35 = 10,904	73 x 147.40 = 10,760
High (9-12)	x = 0	633 x 163.76 = 103,660	x = 0	x = 0
Career Technical Core Space	x = 0	44 x 97.64 = 4,296	x = 0	x = 0
Total ft² Required		152,402.59	62,452.55	62,326.17
ft² Existing	16,330	178,238	83,563	70,084
Large Group Restroom Fixture Replacement	No	No	No	No
Comprehensive Vocational	No	No	No	No
Oversized ft²		7,362	5,290	2,501
Less Oversized ft²	16,330	170,876	78,273	67,583
CT ft² Existing				
CT ft² Not Programmed				
Less CT ft²	16,330	170,876	78,273	67,583
Addition ft²	-16,330	-18,473	-15,820	-5,257
Cost per ft²	see below	see below	see below	see below
<b>Total Addition Cost</b>				
	<b>Cost of Additions</b>	<b>Cost of Additions</b>	<b>Cost of Additions</b>	<b>Cost of Additions</b>
Cost Of New SF	SF Required \$/SF Cost	SF Required \$/SF Cost	SF Required \$/SF Cost	SF Required \$/SF Cost
Elementary (PK-5)	x = \$0.00	x = \$0.00	x = \$0.00	x = \$0.00
Middle (6-8)	x = \$0.00	x = \$0.00	x = \$0.00	x = \$0.00
High (9-12)	x = \$0.00	x = \$0.00	x = \$0.00	x = \$0.00
Career Technical Program Space				
CT Existing ft²				
CT New ft²				
CT Total ft²				
CT Program Total	\$0.00	\$0.00	\$0.00	\$0.00
Total Proposed ft²		159,765	67,743	64,827
Total to Rebuild	\$0.00	\$0.00	\$0.00	\$0.00
Total to Rebuild All Buildings				
Cost to Reno & Reprogram		\$28,907,093.59	\$16,298,167.12	\$13,876,263.37
Total Addition Cost				
Total Career Technical	\$0.00	\$0.00	\$0.00	\$0.00
Project Cost	\$0.00	\$28,907,093.59	\$16,298,167.12	\$13,876,263.37
Asbestos Abatement		\$0.00	\$0.00	\$0.00
Demolition		\$0.00	\$0.00	\$0.00
Exclude Storm Shelter	—	—	—	—
Specific Allowance	\$0.00	\$1,258,347.40	\$644,219.25	\$597,112.70
Total Building Cost	\$0.00	\$30,165,440.99	\$16,942,386.37	\$14,473,376.07
Page Subtotal		\$61,581,203.43		
General Allowance		\$0.00		
Project Agreement LFI		\$8,115,721.96		
Co-Funded Project		\$53,465,481.47		
Total Project Cost		\$61,581,203.43		

## Building Summary - Lange School (94458601)

<b>District:</b> Oakwood City <b>Name:</b> Lange School <b>Address:</b> 219 W. Dorothy Lane Dayton, OH 45429 <b>Bldg. IRN:</b> 94458601				<b>County:</b> Montgomery <b>Area:</b> West Central Ohio (2) <b>Contact:</b> Mr. Frank Eaton <b>Phone:</b> (937) 299-8730 <b>Date Prepared:</b> 2017-08-25 <b>By:</b> Paul W. Garland <b>Date Revised:</b> 2018-03-09 <b>By:</b> Paul Brown					
Current Grades	K	Acreage:	1.60	Suitability Appraisal Summary					
Proposed Grades	N/A	Teaching Stations:	11						
Current Enrollment	135	Classrooms:	9						
Projected Enrollment	N/A								
Addition	Date	HA	Number of Floors	Current Square Feet	Section	Points Possible	Points Earned	Percentage	Rating Category
Original Construction	1940	2	2	16,330	Cover Sheet	—	—	—	—
				1.0 The School Site	100	68	68%	Borderline	
				2.0 Structural and Mechanical Features	200	127	64%	Borderline	
				3.0 Plant Maintainability	100	55	55%	Borderline	
				4.0 Building Safety and Security	200	134	67%	Borderline	
				5.0 Educational Adequacy	200	122	61%	Borderline	
				6.0 Environment for Education	200	138	69%	Borderline	
				LEED Observations	—	—	—	—	
				Commentary	—	—	—	—	
<b>Total</b>					1000	644	64%	Borderline	
*HA = Handicapped Access *Rating = 1 Satisfactory = 2 Needs Repair = 3 Needs Replacement *Const P/S = Present/Scheduled Construction				<b>C=Under Contract</b>					
FACILITY ASSESSMENT				Rating	Dollar Assessment				
Cost Set: 2018									
A.	Heating System	3	\$557,179.60	-	Existing Square Feet				
B.	Roofing	3	\$158,958.10	-	Cost per Sq. Ft.	\$0.00			
C.	Ventilation / Air Conditioning	3	\$0.00	-	Renovation Cost Factor	98.97%			
D.	Electrical Systems	3	\$265,035.90	-	Cost to Renovate (Cost Factor applied)	\$0.00			
E.	Plumbing and Fixtures	2	\$44,000.00	-	Reprogramming Cost	\$0.00			
F.	Windows	3	\$46,800.00	-	Cost to Renovate w/ Reprogramming	\$0.00			
G.	Structure: Foundation	1	\$0.00	-	Cost to Replace	\$0.00			
H.	Structure: Walls and Chimneys	2	\$42,378.50	-	Renovate/Replace	N/A			
I.	Structure: Floors and Roofs	2	\$194,585.00	-	<i>[These calculations are for the case where none of the Building's Additions are slated for demolition. If the Master Plan suggests partial demolition of this Building, the Master Plan will very probably show a different Renovate/Replace ratio, which is representative of the Building without the demolished additions.]</i>				
J.	General Finishes	2	\$95,426.00	-					
K.	Interior Lighting	3	\$85,400.00	-					
L.	Security Systems	3	\$56,540.50	-					
M.	Emergency/Egress Lighting	3	\$16,330.00	-					
N.	Fire Alarm	2	\$28,577.50	-					
O.	Handicapped Access	2	\$132,066.00	-					
P.	Site Condition	2	\$185,276.52	-					
Q.	Sewage System	1	\$0.00	-					
R.	Water Supply	1	\$0.00	-					
S.	Exterior Doors	3	\$22,000.00	-					
T.	Hazardous Material	3	\$44,533.00	-					
U.	Life Safety	2	\$74,256.00	-					
V.	Loose Furnishings	1	\$16,330.00	-					
W.	Technology	3	\$215,229.40	-					
X.	Construction Contingency / Non-Construction Cost	-	\$557,231.21	-					
<b>Total</b>					\$2,838,133.23				

**Building Component Information - Oakwood City (44586) - Lange School (94458601)**

Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Original Construction (1940)		1729		1152	1119		836	412						
Total	0	1,729	0	1,152	1,119	0	836	412	0	0	0	0	0	0
<b>Master Planning Considerations</b> Due to the site being very small and inclusive of the building, drives, parking and hard surface play, any building additions would require underground stormwater detainage. Very close proximity to the property lines limit any additions to the east and west. Any possible additions to the south would be very limited due to the frontage zoning setback. Any additions would be on the area of the hard-surface play, and be limited to a building footprint of approximately 7,500 square feet.														

## Building Summary - Oakwood Jr./Sr. High ()

<b>District:</b> Oakwood City				<b>County:</b> Montgomery		<b>Area:</b> West Central Ohio (2)	
<b>Name:</b> Oakwood Jr./Sr. High				<b>Contact:</b> Paul Waller (HS) & Tim Badenhop (Jr. High)			
<b>Address:</b> 1200 Far Hills Avenue Dayton, 45419				<b>Phone:</b> HS-(937) 297-5325 / Jr. High - (937) 297-5328			
<b>Bldg. IRN:</b>				<b>Date Prepared:</b> 2017-08-23		<b>By:</b> Paul W. Garland	
				<b>Date Revised:</b> 2018-03-09		<b>By:</b> Paul Brown	
Current Grades		7-12	Acreage:		5.00	Suitability Appraisal Summary	
Proposed Grades		N/A	Teaching Stations:		75		
Current Enrollment		1062	Classrooms:		68		
Projected Enrollment		N/A					
Addition		Date	HA	Number of Floors	Current Square Feet		
Original Construction		1927	2	3	76,823	1.0 The School Site 100 64 64% Borderline	
Addition 1		1932	2	2	44,332	2.0 Structural and Mechanical Features 200 122 61% Borderline	
Addition 2		1960	2	1	15,790	3.0 Plant Maintainability 100 56 56% Borderline	
Addition 3		1969	2	2	21,881	4.0 Building Safety and Security 200 131 66% Borderline	
Addition 4		1989	1	3	550	5.0 Educational Adequacy 200 139 70% Satisfactory	
Addition 5		2003	1	2	14,156	6.0 Environment for Education 200 152 76% Satisfactory	
Auditorium Fixed Seating		1927	2	1	4,706	LEED Observations — — —	
Total					178,238	Commentary — — —	
						Total 1000 664 66% Borderline	
						C=Under Contract	
						Existing Square Feet 178,238	
						Cost per Sq. Ft. \$241.06	
						Renovation Cost Factor 98.97%	
						Cost to Renovate (Cost Factor applied) \$28,544,206.62	
						Reprogramming Cost \$362,886.97	
						Cost to Renovate w/ Reprogramming \$28,907,093.59	
						Cost to Replace \$42,966,052.28	
						Renovate/Replace 67.28%	
						[These calculations are for the case where none of the Building's Additions are slated for demolition. If the Master Plan suggests partial demolition of this Building, the Master Plan will very probably show a different Renovate/Replace ratio, which is representative of the Building without the demolished additions.]	

**Building Component Information - Oakwood City (44586) - Oakwood Jr./Sr. High ()**

Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Auditorium Fixed Seating (1927)	4706													
Original Construction (1927)		13393					2820	1106						4480
Addition 1 (1932)		8861		5379	2248									
Addition 2 (1960)		2135												
Addition 3 (1969)		3730												
Addition 4 (1989)		48												
Addition 5 (2003)		1609												
<b>Total</b>	<b>4,706</b>	<b>29,776</b>	<b>0</b>	<b>5,379</b>	<b>2,248</b>	<b>0</b>	<b>2,820</b>	<b>1,106</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,480</b>
<b>Master Planning Considerations</b>		The adjacent residential properties all share a property line with the school building. There is no available land for building additions. Any possible space for building addition would be to either infill the interior courtyard at approximately 8,300 SF, or to add in front of the main entry, at approximately 16,000 SF per floor. There is no space to include additional parking or site circulation at their current locations due to proximity to the School or the adjacent properties.												

## Building Summary - Edwin D Smith Elem (34694)

<b>District:</b> Oakwood City <b>Name:</b> Edwin D Smith Elem <b>Address:</b> 1701 Shafor Blvd Dayton,OH 45419 <b>Bldg. IRN:</b> 34694					<b>County:</b> Montgomery <b>Area:</b> West Central Ohio (2) <b>Contact:</b> Ms. Lynn Cowell <b>Phone:</b> (937) 297-5335 <b>Date Prepared:</b> 2017-08-24 <b>By:</b> Paul W. Garland <b>Date Revised:</b> 2018-03-09 <b>By:</b> Paul Brown							
Current Grades		PK, 1-6		Acreage:		3.00		Suitability Appraisal Summary				
Proposed Grades		N/A		Teaching Stations:		36						
Current Enrollment		458		Classrooms:		34						
Projected Enrollment		N/A										
Addition		Date	HA	Number of Floors		Current Square Feet						
Original Construction		1928	2	3		54,713		Cover Sheet				
Classroom Addition		2003	1	3		12,606		1.0 The School Site				
Gymnasium Addition		1968	2	2		16,244		2.0 Structural and Mechanical Features				
<b>Total</b>						<b>83,563</b>		3.0 Plant Maintainability				
		*HA	=	Handicapped Access				4.0 Building Safety and Security				
		*Rating	=1	Satisfactory				5.0 Educational Adequacy				
			=2	Needs Repair				6.0 Environment for Education				
			=3	Needs Replacement				LEED Observations				
		*Const P/S	=	Present/Scheduled Construction				Commentary				
							<b>Total</b>					
							1000					
							611					
							61%					
							Borderline					
							C=Under Contract					
							Existing Square Feet					
							83,563					
							Cost per Sq. Ft.					
							\$233.90					
							Renovation Cost Factor					
							98.97%					
							Cost to Renovate (Cost Factor applied)					
							\$16,115,402.19					
							Reprogramming Cost					
							\$182,764.94					
							Cost to Renovate w/ Reprogramming					
							\$16,298,167.13					
							Cost to Replace					
							\$19,545,385.70					
							Renovate/Replace					
							83.39%					
							[These calculations are for the case where none of the Building's Additions are slated for demolition. If the Master Plan suggests partial demolition of this Building, the Master Plan will very probably show a different Renovate/Replace ratio, which is representative of the Building without the demolished additions.]					

**Building Component Information - Oakwood City (44586) - Edwin D Smith Elem (34694)**

Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Original Construction (1928)		9542			2814		1717	702						
Gymnasium Addition (1968)		1045		7334										
Classroom Addition (2003)		2694												
Total	0	13,281	0	7,334	2,814	0	1,717	702	0	0	0	0	0	0
<b>Master Planning Considerations</b> <p>Due to the small size of the site with no room to expand, providing any on-site parking or any building additions will be at the cost of playground or open play space. If additions are to be considered, the food delivery and the dumpster pick up will have to be relocated.</p>														

## Building Summary - Harman Elem (15289)

<b>District:</b> Oakwood City <b>Name:</b> Harman Elem <b>Address:</b> 735 Harman Ave Dayton,OH 45419 <b>Bldg. IRN:</b> 15289					<b>County:</b> Montgomery <b>Contact:</b> Mrs. Sarah Patterson <b>Phone:</b> (937) 297-5338 <b>Date Prepared:</b> 2017-08-24 <b>Date Revised:</b> 2018-04-10					<b>Area:</b> West Central Ohio (2) <b>By:</b> Paul W. Garland <b>By:</b> Paul Brown				
Current Grades		1-6		Acreage:		2.20		Suitability Appraisal Summary						
Proposed Grades		N/A		Teaching Stations:		31								
Current Enrollment		452		Classrooms:		27								
Projected Enrollment		N/A												
Addition		Date	HA	Number of Floors		Current Square Feet								
Classroom Addition		1949	2	2		18,739		1.0 The School Site1006060%Borderline						
Classroom Addition		1960	2	2		4,170		2.0 Structural and Mechanical Features20010955%Borderline						
Stairwell Addition		1998	2	2		366		3.0 Plant Maintainability1005656%Borderline						
Classroom Addition		2003	1	2		13,878		4.0 Building Safety and Security20012864%Borderline						
Original Construction		1909	2	2		32,931		5.0 Educational Adequacy20011960%Borderline						
								6.0 Environment for Education20014070%Satisfactory						
								LEED Observations— — — —						
								Commentary— — — —						
								Total100061261%Borderline						
								C=Under Contract						
								Existing Square Feet70,084						
								Cost per Sq. Ft.\$233.90						
								Renovation Cost Factor98.97%						
								Cost to Renovate (Cost Factor applied)\$13,652,186.17						
								Reprogramming Cost\$224,077.21						
								Cost to Renovate w/ Reprogramming\$13,876,263.38						
								Cost to Replace\$16,392,647.60						
								Renovate/Replace84.65%						
								[These calculations are for the case where none of the Building's Additions are slated for demolition. If the Master Plan suggests partial demolition of this Building, the Master Plan will very probably show a different Renovate/Replace ratio, which is representative of the Building without the demolished additions.]						

These calculations are for the case where none of the Building's Additions are slated for demolition. If the Master Plan suggests partial demolition of this Building, the Master Plan will very probably show a different Renovate/Replace ratio, which is representative of the Building without the demolished additions.]

**Building Component Information - Oakwood City (44586) - Harman Elem (15289)**

Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Original Construction (1909)		6652		2007										
Classroom Addition (1949)		3831					1542	693						
Classroom Addition (1960)		73			1944									
Stairwell Addition (1998)		228												
Classroom Addition (2003)		1874												
Total	0	12,658	0	2,007	1,944	0	1,542	693	0	0	0	0	0	0
<b>Master Planning Considerations</b>		This School District does not have bussing for students, which removes the need for a bus loop. The site is sloped with the high point in the southeast corner of the site, which created a need for a high quantity of cast concrete retaining wall. There is no room on this site for building expansion without using area designated for hard-surface play area. The site borders are two residential streets and 2 alleys in very close proximity to the adjacent residences.												

# Master Plan Worksheets for Oakwood Jr./Sr. High

## Reprogramming

Building Name: Oakwood Jr./Sr. High  
 Current Grades Housed: 7-12 ()  
 Existing Building Size (SF): 178,238  
 OSDM Required Building Size: 152,402.59  
 Additional SF: 0  
 District Has Central Food Prep: yes  
 Casework Replacment (Assessment Item J) yes  
 Large Restroom Fixture Replacement no  
 Comprehensive Vocational no

### Projected Enrollment

Level	Enrollment
Middle School	299
High School	633
Career Technical School	44

### Oversized Spaces Review

OSDM Space	Actual Size	Size Per Design Manual	Oversized Amount	Co-Funded	LFI
Corridors	29,776	27,120	2,656	54,240	0
Ag Ed		3,100	0	6,200	0
Gymnasium	5,379	19,000	0	28,500	0
Media Center	2,248	3,417	0	6,834	0
Vocational		3,100	0	6,200	0
Student Dining	2,820	5,693	0	11,386	0
Kitchen	1,106	1,952	0	3,904	0
Auxiliary Gym	4,480	7,000	0	10,500	0
Non-OSDM Space	Actual Size	Size Per Design Manual	Oversized Amount	Co-Funded	LFI
Auditorium Fixed Seating	4,706	0	4,706	04,706	
Total Oversized			7,362	4,706	

### Reprogramming Costs

HARD COST SUB-TOTAL	\$294,673.90
CONSTRUCTION CONTINGENCY	\$20,627.17
SOFT COSTS (16.29%)	\$51,362.54
COST REGION ADJUSTMENT (98.97%)	-\$3,776.64
TOTAL REPROGRAMMING BUDGET	\$362,886.97

### Large Spaces Reprogramming

Space	SF Undersized	% Undersized	Reprogram SF	Cost/SF	Cost
Auditorium		0.00%		\$0.00	\$0.00
Corridors	0	0.00%		\$0.00	\$0.00
Ag Ed		0.00%		\$19.49	\$0.00
Gymnasium	-13,621	71.69%	0	\$19.49	\$0.00
Media Center	-1,169	34.21%	3,417	\$19.49	\$66,597.33
Vocational		0.00%		\$0.00	\$0.00
Student Dining	-2,873	50.47%	5,693	\$19.49	\$110,956.57
Kitchen	-846	43.34%	1,952	\$60.00	\$117,120.00
Natatorium		0.00%		\$0.00	\$0.00
Indoor Track		0.00%		\$0.00	\$0.00
Adult Education		0.00%		\$0.00	\$0.00
Board Offices		0.00%		\$0.00	\$0.00
Outside Agency		0.00%		\$0.00	\$0.00
Auxiliary Gym	-2,520	36.00%		\$0.00	\$0.00
Total			11062		\$294,673.90

If existing area is being converted to ES space, use conversion budget as follows:

Conversion to PK-K Classroom per Room	\$21,450.00
Conversion to 1-5 Classroom per Room	\$7,700.00
Large Group Restroom conversion per SF	\$13.00

Total Students  
 Est. Classrooms

Estimate Classroom Count & LGR Area	Adjusted Count & Area	Reprogramming Budget
PK-K Rooms	0	\$0.00
1-5 Rooms	0	\$0.00
Restrooms	0	\$0.00
Total		\$0.00

## LEED

Building Name: Oakwood Jr./Sr. High  
 Current Grades Housed: 7-12 ()  
 Existing Building Size (SF): 178,238  
 Demolished Additions 0  
 Cost Per SF \$241.06  
 Cost To Replace \$42,966,052.28  
 Leed Allowance \$634,823.42  
 OSDM Required Bldg Size: 152,402.59  
 Additional SF: 0

### LEED Allowance Funded and Project Agreement LFI

Level	Required SF
Middle School	44,446.35
High School	103,660.08
Career Technical School	4,296.16
CT Program SF Required	0
Total	152,402.59
Level	SF Addition
Middle School	
High School	
Career Technical School	
CT Program New	0
Total SF Addition:	0
Total SF Required:	152,402.59
Total SF Addition:	0
SF Required minus SF Addition:	152,402.59

### Oversized Spaces

Co-Funded SF: 2,656  
 Non-Co-Funded SF: 4,706  
 Total SF Oversized Spaces: 7,362

### Excess Space

Excess Space SF: 18,473  
 Excess SF Space CT: 0  
 Total SF Excess Space: 18,473

### LEED Allowance for Co-fundable Spaces:

Total SF Required minus SF Addition: 152,402.59  
 Oversized Co-funded SF: 2,656  
 Total Co-fundable SF: 155,059  
 Total SF x Cost / SF:  $155,059 \times \$241.06 = \$37,378,522.54$   
 1.5% LEED Allowance:  $\$37,378,522.54 \times 98.5\% \times 1.5\% = \$552,267.67$

### LEED Allowance for Non-Cofundable Spaces:

Non-Cofunded SF - : Auditorium Fixed Seating 4706  
 Total SF x Cost / SF:  $4706 \times \$241.06 = \$1,134,428.36$   
 1.5% LEED Allowance:  $\$1,134,428.36 \times 98.5\% \times 1.5\% = \$16,761.18$   
 Non-Cofunded SF: Excess Space 18,473  
 Total SF x Cost / SF:  $18,473 \times \$241.06 = \$4,453,101.38$   
 1.5% LEED Allowance:  $4,453,101.38 \times 98.5\% \times 1.5\% = \$65,794.57$   
 Non-Cofunded SF: Excess Building Component OSDM Space 0  
 Total SF x Cost / SF:  $0 \times \$241.06 = \$0.00$   
 1.5% LEED Allowance:  $\$0.00 \times 98.5\% \times 1.5\% = \$0.00$

LEED Allowance Co-fundable: \$552,267.67  
 LEED Allowance Non-Cofundable: \$82,555.75  
 Total LEED Allowance: \$634,823.42

### Co-Funded Oversized Spaces: Oversized Amount

Corridors 2,656  
 Ag Ed 0  
 Gymnasium 0  
 Media Center 0  
 Vocational 0  
 Student Dining 0  
 Kitchen 0  
 Auxiliary Gym 0  
 Total 2,656

### Non-Cofunded Oversized Spaces: Oversized Amount

Corridors 0  
 Ag Ed 0  
 Gymnasium 0  
 Media Center 0  
 Vocational 0  
 Student Dining 0  
 Kitchen 0  
 Auxiliary Gym 0  
 Auditorium Fixed Seating 4,706  
 Total 4,706

## Cost Data

**Complete Building Cost Data**

Total Cost To Renovate	\$28,544,206.62
M	\$178,238.00
N	\$311,916.50
U fire suppression ONLY	\$525,062.40
Subtotal	\$1,015,216.90
Contingency	\$71,065.18
Non-Construction Costs	\$176,955.35
Regional Cost Factor	-\$13,011.35
Total Life Safety Cost	\$1,250,226.08
less total non-cofunded PALFI life safety	\$34,482.49
Total Co-Funded Life Safety Cost	\$1,215,743.61

**Auditorium Fixed Seating**

Cost to Renovate (Cost Factor applied):	\$892,473.11
M	\$4,706.00
N	\$8,235.50
U fire suppression ONLY	\$15,059.20
Sub Total	\$28,000.70
Contingency	\$1,960.05
Non-Construction Costs	\$4,880.61
Regional Cost Factor	-\$358.87
non-cofunded PALFI life safety	\$34,482.49
Non-OSDM LEED Costs:	\$16,761.18

**PALFI**

Total Enrollment	976
Middle School SF Required	44,446.35
High School SF Required	103,660.08
Career Technical School SF Required	4,296.16
CT Program SF Required	0
Existing Building SF	178,238
Total Oversized	7,362
Total Usable Building SF:	170,876
Addition or (Excess Space) SF:*	-18,473

\* No addition or excess space if between 1,000 SF and -1,000 SF

**LFI Calculation - Excess SF**

Building SF:**	173,532
Renovation Costs	\$27,651,733.51
Reprogramming Costs	\$362,886.97
Cost per SF to Renovate	\$161.44
Life Safety Costs	\$1,215,743.61
Co-Funded Life Safety Cost per SF	\$7.01
LFI Cost per SF	\$154.43
LEED Cost per SF	\$3.56

\*\* Building SF does not include non-OSDM spaces

**Project Agreement LFI For Non-OSDM Spaces Summary**

Auditorium Fixed Seating	
Cost to renovate space: Auditorium Fixed Seating	\$857,990.62
LEED Costs for Space: Auditorium Fixed Seating	\$16,761.18

**Project Agreement LFI Excess Square Foot Summary**

Total Excess Square Footage Renovation PALFI:	\$2,852,785.39
Total Excess Square Footage LEED PALFI:	\$65,763.88
TOTAL PALFI for: Oakwood Jr./Sr. High	\$3,793,301.07

**Project Agreement LFI Excess Square Foot Spaces**

Excess Building	
Cost To Renovate Space 18,473 SF @ \$154.43/SF	\$2,852,785.39
LEED Cost For Space 18,473 SF @ \$3.56/SF	\$65,763.88
Corridors	
Cost To Renovate Space 0 SF @ \$154.43/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.56/SF	\$0.00
Ag Ed	
Cost To Renovate Space 0 SF @ \$154.43/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.56/SF	\$0.00
Gymnasium	
Cost To Renovate Space 0 SF @ \$154.43/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.56/SF	\$0.00
Media Center	
Cost To Renovate Space 0 SF @ \$154.43/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.56/SF	\$0.00
Vocational	
Cost To Renovate Space 0 SF @ \$154.43/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.56/SF	\$0.00
Student Dining	
Cost To Renovate Space 0 SF @ \$154.43/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.56/SF	\$0.00
Kitchen	
Cost To Renovate Space 0 SF @ \$154.43/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.56/SF	\$0.00
Auxiliary Gym	
Cost To Renovate Space 0 SF @ \$154.43/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.56/SF	\$0.00
Non OSDM Spaces In OSDM Additions	
Cost to renovate space: 0 SF @ \$154.43/SF	\$0.00
LEED Costs for Space: 0 SF @ \$3.56/SF	\$0.00
Total Excess Square Footage Renovation PALFI:	\$2,852,785.39
Total Excess Square Footage LEED PALFI:	\$65,763.88

**100% Cap****Project Agreement Locally Funded Initiatives — Renovation**

Corridors	\$0.00
Ag Ed	\$0.00
Gymnasium	\$0.00
Media Center	\$0.00
Vocational	\$0.00
Student Dining	\$0.00
Kitchen	\$0.00
Auxiliary Gym	\$0.00
Non OSDM Spaces In OSDM Additions	\$0.00
Auditorium Fixed Seating	\$857,990.62
Excess SF from Webtool	\$2,852,785.39
Total Renovation PALFI	\$3,710,776.01

**Project Agreement Locally Funded Initiatives — LEED Costs**

Corridors	\$0.00
Ag Ed	\$0.00
Gymnasium	\$0.00
Media Center	\$0.00
Vocational	\$0.00
Student Dining	\$0.00
Kitchen	\$0.00
Auxiliary Gym	\$0.00
Non OSDM Spaces In OSDM Additions	\$0.00
Auditorium Fixed Seating	\$16,761.18
Excess SF from Webtool	\$65,763.88
Total LEED PALFI	\$82,525.06

Right Ratio Calculations	
Cost of Renovation	\$28,544,206.62
Reprogramming	\$362,886.97
LEED Allowance	\$634,823.42
Non-Optional Demo Allowance	\$0.00
Non-Optional Abatement	\$0.00
Addition Cost	\$0.00
Other (specific allowance)	\$0.00
Total Building Cost	\$29,541,917.01
Total LFI's/Building	\$3,793,301.07
Revised Project Cost	\$25,748,615.94
Right Replacement	\$36,358,596.52
100% Cap Differential	-\$10,609,980.58
Negative numbers indicate the dollars remaining until project reaches 100% cap.	
Positive numbers indicate a need for 100% Cap LFI.	

### Storm Shelter

Storm shelter to be built as part of renovation	
ES enrollment	—
MS enrollment	299
HS enrollment	633
CTS enrollment	44
Staff	109
Total occupants	1,085
SF required for occupants (@ 5 SF / occupant)	5,425
Wheelchair occupants (@ 1 / 200 occupants)	6
Additional SF required for wheelchair occupants (@ 10 SF / wheelchair occupant)	60
Water closets required (@ 1 WC / 250 occupants for first 500; 1 WC / 500 occupants for the rest)4	
SF required for water closets (@ 15 SF / WC)	60
Lavatories required (@ 1 lavatory / 1,000 occupants)	
SF required for lavatories (@ 9 SF / lavatory)	18
Required shelter SF	5,563
Usable space	83%
Required SF to allow for useless space ( $1 \div 83\% = 120\%$ )	6,702
Required SF with mechanical area (+ 0.0%)	6,702
<b>Total Required SF (+ 0.0% construction factor)</b>	<b>6,702</b>
SF cost (@ \$88.03 / SF hardened)	\$590,013.12
Peer review fees	\$15,000.00
Testing agency fees	\$25,000.00
Storm shelter construction cost	\$630,013.12
<b>Total storm shelter cost (x 98.97% regional cost factor for West Central Ohio)</b>	<b>\$623,523.98</b>

# Master Plan Worksheets for Edwin D Smith Elem

## Reprogramming

Building Name: Edwin D Smith Elem  
 Current Grades Housed: PK, 1-6 (1)  
 Existing Building Size (SF): 83,563  
 OSDM Required Building Size: 62,452.55  
 Additional SF: 0  
 District Has Central Food Prep: yes  
 Casework Replacement (Assessment Item J): yes  
 Large Restroom Fixture Replacement: no  
 Comprehensive Vocational: no

Projected Enrollment	
Level	Enrollment
Elementary School	507

Oversized Spaces Review					
OSDM Space	Actual Size	Size Per Design Manual	Oversized Amount	Co-Funded	LFI
Corridors	13,281	12,618	663	25,236	0
Gymnasium	7,334	4,000	3,334	6,000	1,334
Media Center	2,814	1,521	1,293	3,042	0
Student Dining	1,717	3,000	0	6,000	0
Kitchen	702	1,014	0	2,028	0
Non-OSDM Space	Actual Size	Size Per Design Manual	Oversized Amount	Co-Funded	LFI
Total Oversized			5,290		1,334

Reprogramming Costs	
HARD COST SUB-TOTAL	\$148,410.00
CONSTRUCTION CONTINGENCY	\$10,388.70
SOFT COSTS (16.29%)	\$25,868.31
COST REGION ADJUSTMENT (98.97%)	-\$1,902.07
TOTAL REPROGRAMMING BUDGET	\$182,764.94

Large Spaces Reprogramming					
Space	SF Undersized	% Undersized	Reprogram SF	Cost/SF	Cost
Auditorium		0.00%		\$0.00	\$0.00
Corridors	0	0.00%		\$0.00	\$0.00
Ag Ed		0.00%		\$19.49	\$0.00
Gymnasium	0	0.00%	0	\$19.49	\$0.00
Media Center	0	0.00%	0	\$19.49	\$0.00
Vocational		0.00%		\$0.00	\$0.00
Student Dining	-1,283	42.77%	3,000	\$19.49	\$58,470.00
Kitchen	-312	30.77%	1,014	\$60.00	\$60,840.00
Natatorium		0.00%		\$0.00	\$0.00
Indoor Track		0.00%		\$0.00	\$0.00
Adult Education		0.00%		\$0.00	\$0.00
Board Offices		0.00%		\$0.00	\$0.00
Outside Agency		0.00%		\$0.00	\$0.00
Auxiliary Gym		0.00%		\$0.00	\$0.00
Total			4014		\$119,310.00

If existing area is being converted to ES space, use conversion budget as follows:  
 Conversion to PK-K Classroom per Room \$21,450.00  
 Conversion to 1-5 Classroom per Room \$7,700.00  
 Large Group Restroom conversion per SF \$13.00

Total Students  
 Est. Classrooms

Estimate Classroom Count & LGR Area	Adjusted Count & Area	Reprogramming Budget
PK-K Rooms 8	0	\$0.00
1-5 Rooms 18	3	\$23,100.00
Restrooms 2,006	33.0659340659341	\$6,000.00
Total		\$29,100.00

## LEED

Building Name:	Edwin D Smith Elem
Current Grades Housed:	PK, 1-6 (1)
Existing Building Size (SF):	83,563
Demolished Additions	0
Cost Per SF	\$233.90
Cost To Replace	\$19,545,385.70
Leed Allowance	\$288,783.07
OSDM Required Bldg Size:	62,452.55
Additional SF:	0

#### LEED Allowance Funded and Project Agreement LFI

Level	Required SF
Elementary School	51,548.65
Middle School	10,903.9
CT Program SF Required	0
Total	62,452.55
Level	SF Addition
Elementary School	
Middle School	
CT Program New	0
Total SF Addition:	0
Total SF Required:	62,452.55
Total SF Addition:	0
SF Required minus SF Addition:	62,452.55

#### Oversized Spaces

Co-Funded SF:	3,956
Non-Co-Funded SF:	1,334
Total SF Oversized Spaces:	5,290

#### Excess Space

Excess Space SF:	15,820
Excess SF Space CT:	0
Total SF Excess Space:	15,820

#### LEED Allowance for Co-fundable Spaces:

Total SF Required minus SF Addition:	62,452.55
Oversized Co-funded SF:	3,956
Total Co-fundable SF:	66,409
Total SF x Cost / SF:	66,409 x \$233.90 = \$15,533,065.10
1.5% LEED Allowance:	\$15,533,065.10 x 98.5% x 1.5% = \$229,501.04

#### LEED Allowance for Non-Cofundable Spaces:

Non-Cofunded SF:	Excess Space	15,820
Total SF x Cost / SF:	15,820 x \$233.90 =	\$3,700,298.00
1.5% LEED Allowance:	3,700,298 x 98.5% x 1.5% =	\$54,671.90
Non-Cofunded SF:	Excess Building Component OSDM Space	1334
Total SF x Cost / SF:	1334 x \$233.90 =	\$312,022.60
1.5% LEED Allowance:	\$312,022.60 x 98.5% x 1.5% =	\$4,610.13

LEED Allowance Co-fundable:	\$229,501.04
LEED Allowance Non-Cofundable:	\$59,282.03
Total LEED Allowance:	\$288,783.07

#### Co-Funded Oversized Spaces: Oversized Amount

Corridors	663
Gymnasium	2,000
Media Center	1,293
Student Dining	0
Kitchen	0
Total	3,956

#### Non-Cofunded Oversized Spaces: Oversized Amount

Corridors	0
Gymnasium	1,334
Media Center	0
Student Dining	0
Kitchen	0
Total	1,334

#### Cost Data

#### Complete Building Cost Data

Total Cost To Renovate	\$16,115,402.19
M	\$83,563.00
N	\$146,235.25
U fire suppression ONLY	\$193,184.00
Subtotal	\$422,982.25
Contingency	\$29,608.76
Non-Construction Costs	\$73,727.08
Regional Cost Factor	-\$5,421.08
Total Life Safety Cost	\$520,897.01
less total non-cofunded PALFI life safety	\$0.00
Total Co-Funded Life Safety Cost	\$520,897.02

#### PALFI

Total Enrollment	507
Elementary School SF Required	51,548.65
Middle School SF Required	10,903.9
CT Program SF Required	0
Existing Building SF	83,563
Total Oversized	5,290
Total Usable Building SF:	78,273
Addition or (Excess Space) SF:*	-15,820
* No addition or excess space if between 1,000 SF and -1,000 SF	

#### LFI Calculation - Excess SF

Building SF:**	83,563
Renovation Costs	\$16,115,402.19
Reprogramming Costs	\$182,764.94
Cost per SF to Renovate	\$195.04
Life Safety Costs	\$520,897.02
Co-Funded Life Safety Cost per SF	\$6.23
LFI Cost per SF	\$188.81
LEED Cost per SF	\$3.46
** Building SF does not include non-OSDM spaces	

#### Project Agreement LFI For Non-OSDM Spaces Summary

##### Project Agreement LFI Excess Square Foot Summary

Total Excess Square Footage Renovation PALFI:	\$3,238,846.74
Total Excess Square Footage LEED PALFI:	\$59,352.84
TOTAL PALFI for:Edwin D Smith Elem	\$3,298,199.58

#### Project Agreement LFI Excess Square Foot Spaces

Excess Building	
Cost To Renovate Space 15,820 SF @ \$188.81/SF	\$2,986,974.20
LEED Cost For Space 15,820 SF @ \$3.46/SF	\$54,737.20
Corridors	
Cost To Renovate Space 0 SF @ \$188.81/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.46/SF	\$0.00
Gymnasium	
Cost To Renovate Space 1,334 SF @ \$188.81/SF	\$251,872.54
LEED Cost For Space 1,334 SF @ \$3.46/SF	\$4,615.64
Media Center	
Cost To Renovate Space 0 SF @ \$188.81/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.46/SF	\$0.00
Student Dining	
Cost To Renovate Space 0 SF @ \$188.81/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.46/SF	\$0.00
Kitchen	
Cost To Renovate Space 0 SF @ \$188.81/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.46/SF	\$0.00
Non OSDM Spaces In OSDM Additions	
Cost to renovate space: 0 SF @ \$188.81/SF	\$0.00
LEED Costs for Space: 0 SF @ \$3.46/SF	\$0.00
Total Excess Square Footage Renovation PALFI:	\$3,238,846.74
Total Excess Square Footage LEED PALFI:	\$59,352.84

#### 100% Cap

#### Project Agreement Locally Funded Initiatives — Renovation

Corridors	\$0.00
Gymnasium	\$251,872.54
Media Center	\$0.00
Student Dining	\$0.00
Kitchen	\$0.00
Non OSDM Spaces In OSDM Additions	\$0.00
Excess SF from Webtool	\$2,986,974.20
Total Renovation PALFI	\$3,238,846.74

#### Project Agreement Locally Funded Initiatives — LEED Costs

Corridors	\$0.00
Gymnasium	\$4,615.64
Media Center	\$0.00
Student Dining	\$0.00
Kitchen	\$0.00
Non OSDM Spaces In OSDM Additions	\$0.00
Excess SF from Webtool	\$54,737.20
Total LEED PALFI	\$59,352.84

Right Ratio Calculations	
Cost of Renovation	\$16,115,402.19
Reprogramming	\$182,764.94
LEED Allowance	\$288,783.07
Non-Optional Demo Allowance	\$0.00
Non-Optional Abatement	\$0.00
Addition Cost	\$0.00
Other (specific allowance)	\$0.00
Total Building Cost	\$16,586,950.20
Total LFI's/Building	\$3,298,199.58
Revised Project Cost	\$13,288,750.62
Right Replacement	\$15,198,107.80
100% Cap Differential	-\$1,909,357.18
Negative numbers indicate the dollars remaining until project reaches 100% cap.	
Positive numbers indicate a need for 100% Cap LFI.	

### Storm Shelter

Storm shelter to be built as part of renovation	
ES enrollment	433
MS enrollment	74
HS enrollment	—
CTS enrollment	—
Staff	78
Total occupants	585
SF required for occupants (@ 5 SF / occupant)	2,925
Wheelchair occupants (@ 1 / 200 occupants)	3
Additional SF required for wheelchair occupants (@ 10 SF / wheelchair occupant)	30
Water closets required (@ 1 WC / 250 occupants for first 500; 1 WC / 500 occupants for the rest)3	
SF required for water closets (@ 15 SF / WC)	45
Lavatories required (@ 1 lavatory / 1,000 occupants)	
SF required for lavatories (@ 9 SF / lavatory)	9
Required shelter SF	3,009
Usable space	83%
Required SF to allow for useless space ( $1 \div 83\% = 120\%$ )	3,625
Required SF with mechanical area (+ 0.0%)	3,625
<b>Total Required SF (+ 0.0% construction factor)</b>	<b>3,625</b>
SF cost (@ \$88.03 / SF hardened)	\$319,135.27
Peer review fees	\$15,000.00
Testing agency fees	\$25,000.00
Storm shelter construction cost	\$359,135.27
<b>Total storm shelter cost (x 98.97% regional cost factor for West Central Ohio)</b>	<b>\$355,436.18</b>

# Master Plan Worksheets for Harman Elem

## Reprogramming

Building Name: Harman Elem  
 Current Grades Housed: 1-6 ()  
 Existing Building Size (SF): 70,084  
 OSDM Required Building Size: 62,326.17  
 Additional SF: 0  
 District Has Central Food Prep: yes  
 Casework Replacement (Assessment Item J) no  
 Large Restroom Fixture Replacement no  
 Comprehensive Vocational no

Projected Enrollment	
Level	Enrollment
Elementary School	506

Oversized Spaces Review					
OSDM Space	Actual Size	Size Per Design Manual	Oversized Amount	Co-Funded	LFI
Corridors	12,658	10,583	2,075	21,166	0
Gymnasium	2,007	4,000	0	6,000	0
Media Center	1,944	1,518	426	3,036	0
Student Dining	1,542	3,000	0	6,000	0
Kitchen	693	1,012	0	2,024	0
Non-OSDM Space	Actual Size	Size Per Design Manual	Oversized Amount	Co-Funded	LFI
Total Oversized			2,501		0

Reprogramming Costs	
HARD COST SUB-TOTAL	\$181,956.67
CONSTRUCTION CONTINGENCY	\$12,736.97
SOFT COSTS (16.29%)	\$31,715.59
COST REGION ADJUSTMENT (98.97%)	-\$2,332.02
TOTAL REPROGRAMMING BUDGET	\$224,077.21

Large Spaces Reprogramming					
Space	SF Undersized	% Undersized	Reprogram SF	Cost/SF	Cost
Auditorium		0.00%		\$0.00	\$0.00
Corridors	0	0.00%		\$0.00	\$0.00
Ag Ed		0.00%		\$19.49	\$0.00
Gymnasium	-1,993	49.83%	0	\$19.49	\$0.00
Media Center	0	0.00%	0	\$19.49	\$0.00
Vocational		0.00%		\$0.00	\$0.00
Student Dining	-1,458	48.60%	3,000	\$19.49	\$58,470.00
Kitchen	-319	31.52%	1,012	\$60.00	\$60,720.00
Natatorium		0.00%		\$0.00	\$0.00
Indoor Track		0.00%		\$0.00	\$0.00
Adult Education		0.00%		\$0.00	\$0.00
Board Offices		0.00%		\$0.00	\$0.00
Outside Agency		0.00%		\$0.00	\$0.00
Auxiliary Gym		0.00%		\$0.00	\$0.00
Total			4012		\$119,190.00

If existing area is being converted to ES space, use conversion budget as follows:  
 Conversion to PK-K Classroom per Room \$26,850.00  
 Conversion to 1-5 Classroom per Room \$13,100.00  
 Large Group Restroom conversion per SF \$13.00

Total Students  
 Est. Classrooms

Estimate Classroom Count & LGR Area	Adjusted Count & Area	Reprogramming Budget
PK-K Rooms 0	0	\$0.00
1-5 Rooms 26	4.33333333333333	\$56,766.67
Restrooms 1,683	46.75	\$6,000.00
Total		\$62,766.67

## LEED

Building Name:	Harman Elem
Current Grades Housed:	1-6 ( )
Existing Building Size (SF):	70,084
Demolished Additions	0
Cost Per SF	\$233.90
Cost To Replace	\$16,392,647.60
Leed Allowance	\$242,201.37
OSDM Required Bldg Size:	62,326.17
Additional SF:	0

#### LEED Allowance Funded and Project Agreement LFI

Level	Required SF
Elementary School	51,565.97
Middle School	10,760.2
CT Program SF Required	0
Total	62,326.17
Level	SF Addition
Elementary School	
Middle School	
CT Program New	0
Total SF Addition:	0
Total SF Required:	62,326.17
Total SF Addition:	0
SF Required minus SF Addition:	62,326.17

#### Oversized Spaces

Co-Funded SF:	2,501
Non-Co-Funded SF:	0
Total SF Oversized Spaces:	2,501

#### Excess Space

Excess Space SF:	5,257
Excess SF Space CT:	0
Total SF Excess Space:	5,257

#### LEED Allowance for Co-fundable Spaces:

Total SF Required minus SF Addition:	62,326.17
Oversized Co-funded SF:	2,501
Total Co-fundable SF:	64,827
Total SF x Cost / SF:	64,827 x \$233.90 = \$15,163,035.30
1.5% LEED Allowance:	\$15,163,035.30 x 98.5% x 1.5% = \$224,033.85

#### LEED Allowance for Non-Cofundable Spaces:

Non-Cofunded SF:	Excess Space	5,257
Total SF x Cost / SF:		5,257 x \$233.90 = \$1,229,612.30
1.5% LEED Allowance:		1,229,612.3 x 98.5% x 1.5% = \$18,167.52
Non-Cofunded SF:	Excess Building Component OSDM Space	0
Total SF x Cost / SF:		0 x \$233.90 = \$0.00
1.5% LEED Allowance:		\$0.00 x 98.5% x 1.5% = \$0.00

LEED Allowance Co-fundable:	\$224,033.85
LEED Allowance Non-Cofundable:	\$18,167.52
Total LEED Allowance:	\$242,201.37

#### Co-Funded Oversized Spaces: Oversized Amount

Corridors	2,075
Gymnasium	0
Media Center	426
Student Dining	0
Kitchen	0
Total	2,501

#### Non-Cofunded Oversized Spaces: Oversized Amount

Corridors	0
Gymnasium	0
Media Center	0
Student Dining	0
Kitchen	0
Total	0

#### Cost Data

#### Complete Building Cost Data

Total Cost To Renovate	\$13,652,186.17
M	\$70,084.00
N	\$122,647.00
U fire suppression ONLY	\$183,763.20
Subtotal	\$376,494.20
Contingency	\$26,354.59
Non-Construction Costs	\$65,624.07
Regional Cost Factor	-\$4,825.27
Total Life Safety Cost	\$463,647.59
less total non-cofunded PALFI life safety	\$0.00
Total Co-Funded Life Safety Cost	\$463,647.59

#### PALFI

Total Enrollment	506
Elementary School SF Required	51,565.97
Middle School SF Required	10,760.2
CT Program SF Required	0
Existing Building SF	70,084
Total Oversized	2,501
Total Usable Building SF:	67,583
Addition or (Excess Space) SF:*	-5,257
* No addition or excess space if between 1,000 SF and -1,000 SF	

#### LFI Calculation - Excess SF

Building SF:**	70,084
Renovation Costs	\$13,652,186.17
Reprogramming Costs	\$224,077.21
Cost per SF to Renovate	\$197.99
Life Safety Costs	\$463,647.59
Co-Funded Life Safety Cost per SF	\$6.62
LFI Cost per SF	\$191.37
LEED Cost per SF	\$3.46
** Building SF does not include non-OSDM spaces	

#### Project Agreement LFI For Non-OSDM Spaces Summary

##### Project Agreement LFI Excess Square Foot Summary

Total Excess Square Footage Renovation PALFI:	\$1,006,032.09
Total Excess Square Footage LEED PALFI:	\$18,189.22
TOTAL PALFI for:Harman Elem	\$1,024,221.31

#### Project Agreement LFI Excess Square Foot Spaces

Excess Building	
Cost To Renovate Space 5,257 SF @ \$191.37/SF	\$1,006,032.09
LEED Cost For Space 5,257 SF @ \$3.46/SF	\$18,189.22
Corridors	
Cost To Renovate Space 0 SF @ \$191.37/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.46/SF	\$0.00
Gymnasium	
Cost To Renovate Space 0 SF @ \$191.37/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.46/SF	\$0.00
Media Center	
Cost To Renovate Space 0 SF @ \$191.37/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.46/SF	\$0.00
Student Dining	
Cost To Renovate Space 0 SF @ \$191.37/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.46/SF	\$0.00
Kitchen	
Cost To Renovate Space 0 SF @ \$191.37/SF	\$0.00
LEED Cost For Space 0 SF @ \$3.46/SF	\$0.00
Non OSDM Spaces In OSDM Additions	
Cost to renovate space: 0 SF @ \$191.37/SF	\$0.00
LEED Costs for Space: 0 SF @ \$3.46/SF	\$0.00
Total Excess Square Footage Renovation PALFI:	\$1,006,032.09
Total Excess Square Footage LEED PALFI:	\$18,189.22

#### 100% Cap

#### Project Agreement Locally Funded Initiatives — Renovation

Corridors	\$0.00
Gymnasium	\$0.00
Media Center	\$0.00
Student Dining	\$0.00
Kitchen	\$0.00
Non OSDM Spaces In OSDM Additions	\$0.00
Excess SF from Webtool	\$1,006,032.09
Total Renovation PALFI	\$1,006,032.09

#### Project Agreement Locally Funded Initiatives — LEED Costs

Corridors	\$0.00
Gymnasium	\$0.00
Media Center	\$0.00
Student Dining	\$0.00
Kitchen	\$0.00
Non OSDM Spaces In OSDM Additions	\$0.00
Excess SF from Webtool	\$18,189.22
Total LEED PALFI	\$18,189.22

Right Ratio Calculations	
Cost of Renovation	\$13,652,186.17
Reprogramming	\$224,077.21
LEED Allowance	\$242,201.37
Non-Optional Demo Allowance	\$0.00
Non-Optional Abatement	\$0.00
Addition Cost	\$0.00
Other (specific allowance)	\$0.00
Total Building Cost	\$14,118,464.75
Total LFI's/Building	\$1,024,221.31
Revised Project Cost	\$13,094,243.44
Right Replacement	\$15,167,872.04
100% Cap Differential	-\$2,073,628.61
Negative numbers indicate the dollars remaining until project reaches 100% cap.	
Positive numbers indicate a need for 100% Cap LFI.	

### Storm Shelter


Storm shelter to be built as part of renovation	
ES enrollment	433
MS enrollment	73
HS enrollment	—
CTS enrollment	—
Staff	78
Total occupants	584
SF required for occupants (@ 5 SF / occupant)	2,920
Wheelchair occupants (@ 1 / 200 occupants)	3
Additional SF required for wheelchair occupants (@ 10 SF / wheelchair occupant)	30
Water closets required (@ 1 WC / 250 occupants for first 500; 1 WC / 500 occupants for the rest)3	
SF required for water closets (@ 15 SF / WC)	45
Lavatories required (@ 1 lavatory / 1,000 occupants)	
SF required for lavatories (@ 9 SF / lavatory)	9
Required shelter SF	3,004
Usable space	83%
Required SF to allow for useless space ( $1 \div 83\% = 120\%$ )	3,619
Required SF with mechanical area (+ 0.0%)	3,619
<b>Total Required SF (+ 0.0% construction factor)</b>	<b>3,619</b>
SF cost (@ \$88.03 / SF hardened)	\$318,604.96
Peer review fees	\$15,000.00
Testing agency fees	\$25,000.00
Storm shelter construction cost	\$358,604.96
<b>Total storm shelter cost</b> (x 98.97% regional cost factor for West Central Ohio)	<b>\$354,911.33</b>

<a href="#">Return To MasterPlan</a>						
Specific Allowances						
Building	Category	Name	Amount	Comments	Cost Column	Include In Right Ratio
Oakwood Jr./Sr. High	LEED	LEED Allowance for building renovation	\$634,823.42		Base CM & A/E Services	no
Oakwood Jr./Sr. High	Storm Shelter	Storm Shelter allowance (hardening 6,702 SF)	\$623,523.98		Base CM & A/E Services	no
Edwin D Smith Elem	LEED	LEED Allowance for building renovation	\$288,783.07		Base CM & A/E Services	no
Edwin D Smith Elem	Storm Shelter	Storm Shelter allowance (hardening 3,625 SF)	\$355,436.18		Base CM & A/E Services	no
Harman Elem	LEED	LEED Allowance for building renovation	\$242,201.37		Base CM & A/E Services	no
Harman Elem	Storm Shelter	Storm Shelter allowance (hardening 3,619 SF)	\$354,911.33		Base CM & A/E Services	no
Total			\$2,499,679.35			
<a href="#">Return To MasterPlan</a>						

<a href="#">Return To MasterPlan</a>			
Project Agreement LFIs			
Building	Name	Amount	Comments
Oakwood Jr./Sr.	High Cost to renovate space Excess Building SF	\$2,852,785.39	
Oakwood Jr./Sr.	High LEED Costs Excess Building SF	\$65,763.88	
Oakwood Jr./Sr.	High Cost to renovate space Auditorium Fixed Seating	\$857,990.62	
Oakwood Jr./Sr.	High LEED Costs for space Auditorium Fixed Seating	\$16,761.18	
Edwin D Smith Elem	Cost to renovate space Excess Building SF	\$2,986,974.20	
Edwin D Smith Elem	LEED Costs Excess Building SF	\$54,737.20	
Edwin D Smith Elem	Cost to renovate space Gymnasium	\$251,872.54	
Edwin D Smith Elem	LEED Costs for space Gymnasium	\$4,615.64	
Harman Elem	Cost to renovate space Excess Building SF	\$1,006,032.09	
Harman Elem	LEED Costs Excess Building SF	\$18,189.22	
<b>Total</b>		\$8,115,721.96	
<a href="#">Return To MasterPlan</a>			

Oakwood City Schools  
Summary Cost Report

## Requirement Forecast Report - Summary

<b>Subtotal Construction Cost</b>		<b>9,977,424</b>		Architectural	\$	2,047,000
Estimate Contingency	10.0%	997,742		HVAC/Plumbing	\$	4,556,536
Contractor General Conditions	5.0%	498,871		Electrical	\$	757,779
Project Contingency	7.0%	698,420		Technology	\$	1,016,109
Phasing Costs	3.0%	299,323		Smith Elementary	\$	800,000
<b>Total Estimate of Probable Construction Costs</b>		<b>12,471,780</b>		Harman Elementary	\$	800,000
Project Soft Costs	18.0%	2,244,920				
Hazardous Material Remediation	OFCC x 75%	1,882,145				
<b>TOTAL Estimate of Probable Project Costs</b>		<b>16,598,845</b>				
Available Bond Issue Funds		16,500,000				
Difference Between Est. of Project Costs and Available Funds		98,845				

Oakwood City Schools  
Assessment Prioritization for Junior High / High School  
Architectural

Requirement Forecast Report - Architectural

Ratings to be based on the following scoring system

Client:		Oakwood City Schools				1. End of useful life			
Campus:		High School / Junior School				2. In need of Repair/Replacement			
Asset:		Oakwood High School / Junior High				3. Condition is satisfactory			
Building Area:		178,238	sf			4. Recently replaced			
						5. New work is Recommended			
								Prioritization	
Building Envelope JH		Quantity		Detail (models, sizing, etc.)	Condition	Unit Cost	Total Cost	Yes	No
	Single-Ply Membrane - Fully Adhered	7,150	sf	Gym roof was replaced approximately 1994 and has exceeded the system's life expectancy. Also includes outdated membrane roofing over locker room areas.	2	\$ 12.00	85,800	X	
	Slate Tile Roofing (Original)	18,250	sf	Individual tiles are brittle, cracked, broken, missing throughout the roof areas. Nails are reported as brittle and breaking causing tiles to come loose. Flashings appear worn throughout, and are staining tiles at drip areas. (Area is estimated with slope)	1	\$ 27.00	394,200	X	
	Slate Tile Roofing (2005 Additions)	6,450	sf	Area of Slate installed in 2005 is in satisfactory condition.	3	\$ -	-		
	Modified Bitumen Roofing	7,500	sf	Built-up roofing appears to be very worn and past the useful life of the system. Flashings appear worn. Recommend to replace with single-ply membrane roofing to match existing membrane.	1	\$ 15.00	112,500	X	
	Single-Ply Membrane - Fully Adhered	5,270	sf	Miscellaneous membrane roofing areas installed in 2005, and within the past few years.	3	\$ -	-		
	Gutters and Downspouts	200	lf	5-10% of Miscellaneous gutters and downspouts need immediate repair and/or replacement.	2	\$ 17.75	3,550	X	
Interior Renovations for Building Systems - JH									
	Interior Walls - Plaster Renovation	500	sf	Assumed for Patch / Repair for HVAC replacements.	2	\$ 30.00	15,000	X	
	Interior Walls - Plaster Renovation	250	sf	Assumed for Patch / Repair for Elec/Tech replacements.	2	\$ 30.00	7,500	X	
	Interior Walls - CMU Renovation	1,000	sf	Assumed for Patch / Repair for HVAC replacements.	2	\$ 45.00	45,000	X	
	Interior Walls - CMU Renovation	250	sf	Assumed for Patch / Repair for Elec/Tech replacements.	2	\$ 45.00	11,250	X	
	Concrete Renovation for Systems	2,150	sf	Assumed for Cutting Openings for vertical HVAC piping and ductwork and sanitary piping replacement.	2	\$ 52.50	45,150	X	
	Plaster Ceiling Renovation	5,100	sf	Remove portion of ceiling to accommodate new Building Systems, and replace after Building Systems.	2	\$ 13.50	68,850	X	
	ACT Ceiling Renovation	1,000	sf	Remove ceiling tiles, protect, and replace after new Building Systems are installed.	2	\$ 3.00	3,000	X	
	Custom Millwork Renovation	1,200	lf	At media center, remove millwork, protect, and replace after new HVAC piping is installed.	5	\$ 15.00	18,000	X	

Set at 80%

Set at 40%

Oakwood City Schools  
Assessment Prioritization for Junior High / High School  
Architectural

Building Envelope HS									
	Single-Ply Membrane - Fully Adhered	23,200	sf	Previously replaced single-ply membrane roofing is in overall good condition.	4	\$ -	-		
	Single-Ply Membrane - Fully Adhered - Dormers	1,700	sf	Miscellaneous Dormer roofing appears worn.	5	\$ 15.00	25,500	X	
	Slate Tile Roofing (Original)	37,500	sf	Individual tiles are brittle, cracked, broken, missing throughout the roof areas. Nails are reported as brittle and breaking causing tiles to come loose. Flashings appear worn throughout, and are staining tiles at drip areas. (Area is estimated with slope)	1	\$ 27.00	810,000	X	
	Slate Tile Roofing (2005 Addition)	2,250	sf	Area of Slate installed in 2005 is in satisfactory condition.	3	\$ -	-		
	Modified Bitumen Roofing	1,400	sf	Built-up roofing appears to be very worn and past the useful life of the system. Flashings appear worn. Recommend to replace with single-ply membrane roofing to match existing membrane.	1	\$ 15.00	21,000	X	
	Copper Metal Roofing	14	sf	2005 Addition appears in good condition.	3	\$ -	-		
	Gutters and Downspouts	200	lf	5-10% of Miscellaneous gutters and downspouts need immediate repair and/or replacement.	2	\$ 17.75	3,550	X	
							-		
Interior Renovations for Building Systems - HS							-		
	Interior Walls - Plaster Renovation	1,500	sf	Assumed for Patch / Repair for HVAC replacements.	2	\$ 30.00	45,000	X	
	Interior Walls - Plaster Renovation	750	sf	Assumed for Patch / Repair for Elec/Tech replacements.	2	\$ 30.00	22,500	X	
	Interior Walls - CMU Renovation	1,500	sf	Assumed for Patch / Repair for HVAC replacements.	2	\$ 45.00	67,500	X	
	Interior Walls - CMU Renovation	500	sf	Assumed for Patch / Repair for Elec/Tech replacements.	2	\$ 45.00	22,500	X	
	Concrete Renovation for Systems	1,650	sf	Assumed for Cutting Openings for vertical HVAC piping and ductwork and sanitary piping replacement.	2	\$ 52.50	34,650	X	
	Plaster Ceiling Renovation	7,200	sf	Remove portion of ceiling to accommodate new Building Systems, and replace after Building Systems.	2	\$ 13.50	97,200	X	
	Plaster Ceiling Renovation - Add Alternate	2,400	sf	If Theatre ductwork requires insulation: Remove entire cafeteria plaster ceiling (net add of 2400 sf over base bid) and replace.	2	\$ 13.50	32,400	X	
	12x12 Metal Tile Ceiling Demolition	1,300	sf	Remove 12x12 metal tile ceiling system and replace with 2x4 Cleanable ACT throughout entire Kitchen to accommodate new Building Systems.	1	\$ 5.00	6,500	X	
	ACT Ceiling Renovation	16,300	sf	Remove ceiling tiles, protect, and replace after new Building Systems are installed.	2	\$ 3.00	48,900	X	
	Construction Needed for New Water Chiller Plant	600	sf	Addition will be needed to the building	5	\$ 180.00	-		X
Subtotal Project Cost							2,047,000		

Set at 80%

Set at 40%

Oakwood City Schools  
Assessment Prioritization for Junior High / High School  
Plumbing / HVAC

Requirement Forecast Report - Plumbing/HVAC

Ratings to be based on the following scoring system

Client:		Oakwood City Schools				1. End of useful life			
Campus:		High School / Junior School				2. In need of Repair/Replacement			
Asset:		Oakwood High School / Junior High				3. Condition is satisfactory			
Building Area:		178,238	sf			4. Recently replaced			
						5. New work is recommended		Prioritization	

Set at 40%

Set at 40%

Set at 40%

## Plumbing / HVAC

<b>Subtotal Project Costs</b>	<b>4,556,536</b>
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Oakwood City Schools  
Assessment Prioritization for Junior High / High School  
Electrical

Requirement Forecast Report - Electrical

Ratings to be based on the following scoring system

Client:		Oakwood City Schools				1. End of useful life			
Campus:		High School / Junior School				2. In need of Repair/Replacement			
Asset:		Oakwood High School / Junior High				3. Condition is satisfactory			
Building Area:		178,238	sf			4. Recently replaced			
						5. New work Recommended		Prioritization	
		Quantity		Detail (models, sizing, etc.)	Condition	Unit Cost	Total Cost	Yes	No
Electrical									
	New Electrical Service	1	ls	New 1200A 480V electrical service to serve new HVAC (chiller) loads. Consists of a 1200A distribution panelboard with approximately 10 circuit breakers.	5	42,980.00	42,980	X	
	Incoming Electrical Service	4	ea	2x800's    2x400's	3		-		
	Switchboards	5	ea	Newer Undamaged Distribution Panels (serving as switchgear). (2) 800A, (3) 400A.	3	-	-		
		1	ea	Older 800A switchgear (Square D). Needs replaced.	2	36,300.00	36,300	X	
	Panelboards	14	ea	Old/Damaged Panelboards. Need Replaced. Assume 42 ckt. 225A.	2	5,325.00	74,550	X	
		31	ea	Newer Undamaged Panelboards. Average of >15 year life remaining.	3	-	-		
	Disconnects	6	ea	Old/Damaged Disconnects. Need Replaced	2	1,200.00	7,200	X	
		8	ea	Newer Undamaged Disconnects. Average of >15 year life remaining.	3	-	-		
	Emergency System	-	ea	No emergency generator or fire pump		-	-		
	Interior Lighting	164,082	sf	Circuiting as needed for new lighting fixtures denoted below	2	1.50	123,062	X	
	Classrooms	564	ea	T8 troffers. Upgrade to LED (number assumes 12 fixtures per classroom)	2	310.00	-		X
	Labs	176	ea	T8 troffers. Upgrade to LED (number assumes 16 fixtures per Lab)	2	310.00	-		X
	Corridors	363	ea	T8 troffers (primarily). Upgrade to LED	2	310.00	112,530	X	
	Gymnasium - HS	15	ea	Incandescent downlights. Upgrade to LED.	2	295.00	4,425	X	
	Gymnasium - JR HS	29	ea	Surface mounted metal halide high bay fixtures. Upgrade to LED.	2	775.00	22,475	X	
	Auditorium	30	ea	Recessed incandescent lighting. Upgrade to LED	2	375.00	11,250	X	
	Cafeteria	59	ea	Direct/Indirect T12 suspended fixtures. Replace with LED.	2	390.00	23,010	X	

Set at 50%

Oakwood City Schools  
Assessment Prioritization for Junior High / High School  
Electrical

	Kitchen	15	ea	T8 troffers (4-lamp). Upgrade to LED.	2	310.00	4,650	<b>X</b>	
	Media Center	28	ea	10 Decorative Pendants, 10 recessed downlights (10" aperature), and 8 decorative sconces. Upgrade all to LED.	2	550.00	-		<b>X</b>
	Administration	50	ea	T8 troffers. Upgrade to LED.	2	310.00	-		<b>X</b>
	Restroom	67	ea	T12 surface fixtures. Cove lighting in 2 small bathrooms. 1'x4' T8 troffers in 10 medium sized bathrooms. Upgrade to LED.	2	350.00	-		<b>X</b>
	General	77	ea	Mostly damaged and aged T12 surface or suspended wraparound type fixtures. Upgrade to LED.	2	310.00	-		<b>X</b>
	Switching (2 per classroom & lab, all else 1)	168	ea	Good Condition.	3	-	-		
		42	ea	Damaged/Aged. (20%)	2	63.15	-		<b>X</b>
	Classroom Receptacles	188	ea	Good Condition.	3	-	-		
		188	ea	Damaged/Aged. (50%)	2	157.00	-		<b>X</b>
	Lab Receptacles	88	ea	Good Condition.	3	-	-		
		22	ea	Damaged/Aged. (20%)	2	157.00	-		<b>X</b>
	Corridor Receptacles	24	ea	Good Condition.	3	-	-		
		6	ea	Damaged/Aged. (20%)	2	157.00	-		<b>X</b>
	Receptacles - All other areas	50	ea	Good Condition.	3	-	-		
		50	ea	Damaged/Aged. (50%)	2	157.00	-		<b>X</b>
	Receptacle Circuiting	164,082	sf	Circuiting as needed for new receptacles	2	1.50	49,225		<b>X</b>
	Mechanical Equipment Power	164,082	sf	Disconnect and reconnect HVAC systems	2	1.50	246,123	<b>X</b>	
	Fire Alarm System	1	ea	Devices and panels appear to be in excellent condition. Typically these systems are replaced every 15 years.	4	-	-		
	Exit/Emergency Lighting	164,082	sf	All exit signs have been recently replaced.	3	-	-		
	Exterior Lighting	9	ea	Decorative Post top luminaires on 15' poles. Poles in good condition. Luminaires need upgraded to LED.	2	1,100.00	-		<b>X</b>
		7	ea	Inground luminaires. Need re-aimed.	3	50.00	-		<b>X</b>
		8	ea	Inground luminaires. Need replaced/upgraded to LED	2	845.00	-		<b>X</b>
		7	ea	Decorative Wall Sconce at Entrances. Replace/Upgrade to LED	2	710.00	-		<b>X</b>
		3	ea	Jelly Jar Lights above side entry doors. Replace/Upgrade to LED	2	255.00	-		<b>X</b>
		8	ea	Over door sconce. Upgrade to LED	2	710.00	-		<b>X</b>
		15	ea	Trapezoid Wallpacks. Upgrade to LED	2	685.00	-		<b>X</b>
		16	ea	Soffit Can lights. Replace with LED	2	385.00	-		<b>X</b>
Subtotal Project Costs							757,779		

Set at 20%

Oakwood City Schools  
Assessment Prioritization for Junior High / High School  
Technology

## Requirement Forecast Report - Technology

Ratings to be based on the following scoring system

Client: Oakwood City Schools					1. End of useful life					
Campus: High School / Junior School					2. In need of Repair/Replacement					
Asset: Oakwood High School / Junior High					3. Condition is satisfactory					
Building Area:			178,238	sf	4. Recently replaced					
					5. New work Recommended					
							Prioritization			
Building Envelope			Quantity		Detail (models, sizing, etc.)	Condition	Unit Cost	Total Cost	Yes	No
Technology										
Paging System and Speakers			178,238	sf	The existing paging system has reached the end of it's life. Replacement parts and support are not available for the existing system. Existing speakers are outdated and some are also damaged throughout the building. It is recommended that a new paging system be provided for the entire building. This would include a new headend, new speakers, and new cabling.	1	\$ 0.75	-		X
Clock System			178,238	sf	The existing clocks are a mixture of digital clocks in corridors and non-synchronus clocks in classrooms and misc. spaces. It is recommended the the entire building be provided with a synchronous clock system that is tied into other systems within the building.	2	\$ 0.40	-		X
Phone System and Phones			90	ea	The existing analog phone system has reached the end of it's life. When existing phones stop working, the only phones available for replacement with the existing system are refurbished ones. It is recommended that a new IP phone system be provided. This will include a new phone switch or managed system, and all new IP phones.	1	\$ 675.00	60,750	X	
Horizontal Cabling Infrastructure			178,238	sf	The data cabling in the building is currently a mixture of Category 5, 5E, and 6. There are many existing locations where the cabling appears to be damaged. It is recommended that the cabling to support wireless access points be updgraded to Category 6A to support higher bandwidth. This will allow the wireless network to support more wireless devices at higher speeds. It is also recommended that all the Category 5 and 5e cabling in the building be replaced with Category 6A cabling. This will also support higher bandwidth.	2	\$ 1.80	320,828	X	
Fiber Backbone Cabling Infrastructure			3,000	lf	The existing fiber backbone is currently 62.5 multi-mode fiber optic cable. This will only support a 1 Gb backbone for the network. It is recommended that this cable be replaced with 50 micron multi-mode fiber optic cable. This will support a 10 Gb backbone to support higher bandwidth speeds and more devices on the the network.	1	\$ 8.00	24,000	X	

Oakwood City Schools  
Assessment Prioritization for Junior High / High School  
Technology

	Pathways for Horizontal Data Cabling	178,238	sf	The existing raceway and junctions boxes for many of the data locations have been damaged. Raceway is torn of the wall, boxes are hanging by the data cables, etc. It is recommended that all new pathways be provided to support the horizontal data cabling.	1	\$ 1.00	53,471		X
	Classroom AV Cabling	65	ea	The existing AV cabling in classrooms is analog VGA cabling. Computers are refreshed every 4 years, and newer computers will no longer support analog VGA video. It is recommended that the classrooms be upgraded with digital HDMI cabling between the teacher's computer and video display.		\$ 495.00	-		X
	Classroom Displays	35	ea	There is a mixture of new LED ceiling mounted projectors and older discontinued LCD projectors in the building. It is recommended that the older LCD projectors be replaced with the new LED ceiling mounted projector.	2	\$ 2,750.00	-		X
	Classroom Sound Systems	65	ea	The existing sound system in the classrooms consists of a single speaker typically mounted on the teaching wall. This speaker has reached the end of its life. It is recommended that a new small amplifier and 2 ceiling speakers be provided in each room for the audio from the teacher's PC to be evenly distributed in the room.	2	\$ 1,200.00	-		X
	Network Switching	178,238	sf	The existing core switch has recently been replaced and does not need to be upgraded. The edge switching throughout the building has reached the end of its life. It is recommended that the edge switches be replaced to support a 10 Gb network.	2	\$ 1.10	196,062		X
	Wireless Network	178,238	sf	The existing wireless network was estimated to be updated within the last 3-4 years. The existing licensing agreement for the existing access points expires in May, 2019. It is recommended that the wireless access points be replaced with newer models of wireless access points. This will allow the wireless network to support more devices at higher speeds.	2	\$ 1.25	222,798		X
<b>Security</b>									
	Access Control	7	ea	Currently there is no Access Control System in the school. An access control system is recommended to be provided with card readers at 7 doors.	1	\$ 6,000.00	42,000		X
	Video Surveillance	74	ea	Currently there are 30 interior and 7 exterior analog video surveillance cameras. It is recommended to replace the existing analog cameras with higher resolution IP cameras and add an additional 21 interior and 16 exterior IP cameras to provide better video surveillance coverage in the building.	1	\$ 1,300.00	96,200		X
	Intrusion Detection	85,347	sf	Currently there is only intrusion detection located in computer labs. Intrusion detection is recommended for the entire first floor. This would be accomplished by providing door contacts on all exterior doors and motion detectors on the first floor.	1	\$ 0.69	-		X
<b>Subtotal Project Costs</b>							<b>1,016,109</b>		

Set at 30%

**Harman School**, which is not on the National Register of Historic Buildings, and originally constructed in 1909, is a 3 story, 70,084 square foot brick and stone school building located in a suburban residential setting. There have been four additions to the facility in 1949, 1960, 1998 and 2003. The existing facility features a conventionally partitioned design, and does not utilize modular buildings. The structure of the **1909 Original Construction** contains masonry type exterior wall construction, with **wood framing and plaster type wall** construction in the interior. **The floor system consists of wood framing. The roof structure is wood framing.** The roofing system of the overall facility is a combination of fully adhered TPO membrane, concrete slate shingles and asphalt shingles, installed in 1993, over 24 years ago. The structure of the **1949 Addition and 1960 Addition** contains masonry type exterior wall construction, with **wood framing and plaster type wall** construction in the interior. The floor system consists of site cast concrete. The **roof structure is wood framing.** The 1998 Addition is a courtyard infill project with gypsum board on metal studs type wall construction in the interior. The floor system consists of steel bar joists with concrete and metal decking. The 2003 Addition contains brick and stone veneer on metal studs exterior wall construction, with metal stud and gypsum board type construction in the interior. The floor system consists of precast concrete planks on steel framing. The ventilation system of the building is inadequate to meet the needs of the users. The Classrooms are undersized in terms of the current standards established by the State of Ohio except for the 2003 Addition. Physical Education and Student Dining spaces consist of one Gymnasium and separate Student Dining. The electrical system for the facility is generally adequate. The facility is **equipped with a security system.** The building **has a non-compliant automatic fire alarm system.** The facility is **not equipped with an automated fire suppression system.** The building is reported to contain asbestos and other hazardous materials. The overall building is not compliant with ADA accessibility requirements. Only the **2003 Addition is compliant with ADA accessibility requirements.** The school is located on a 2-acre site adjacent to residential properties. The property and playgrounds are fenced for security. Access onto the site is restricted. Site circulation is poor. There is no dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is inadequate.

This School District does not have bussing for students, which removes the need for a bus loop. The site is sloped with the high point in the southeast corner of the site, which created a need for a high quantity of cast concrete retaining wall. There is no room on this site for building expansion without using area designated for hard-surface play area. The site borders are two residential streets and 2 alleys in very close proximity to the adjacent residences.

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## Building Summary - Harman Elem (15289)

<b>District:</b> Oakwood City				<b>County:</b> Montgomery		<b>Area:</b> West Central Ohio (2)				
<b>Name:</b> Harman Elem				<b>Contact:</b> Mrs. Sarah Patterson						
<b>Address:</b> 735 Harman Ave Dayton,OH 45419				<b>Phone:</b> (937) 297-5338						
<b>Bldg. IRN:</b> 15289				<b>Date Prepared:</b> 2017-08-24				<b>By:</b> Paul W. Garland		
				<b>Date Revised:</b> 2018-04-10				<b>By:</b> Paul Brown		
Current Grades		1-6	Acreage:		2.20	Suitability Appraisal Summary				
Proposed Grades		N/A	Teaching Stations:		31					
Current Enrollment		452	Classrooms:		27					
Projected Enrollment		N/A								
Addition		Date	HA	Number of Floors	Current Square Feet	<b>Section</b>				
<a href="#">Original Construction</a>		1909	no	2	32,931	<b>Points Possible</b>				
<a href="#">Classroom Addition</a>		1949	no	2	18,739	<b>Points Earned</b>				
<a href="#">Classroom Addition</a>		1960	no	2	4,170	<b>Percentage</b>				
<a href="#">Stairwell Addition</a>		1998	no	2	366	<b>Rating</b>				
<a href="#">Classroom Addition</a>		2003	yes	2	13,878	<b>Category</b>				
<b>Total</b>					<b>70,084</b>	<a href="#">Cover Sheet</a>				
						—				
						100				
						60				
						60%				
						Borderline				
						200				
						109				
						55%				
						Borderline				
						100				
						56				
						56%				
						Borderline				
						200				
						128				
						64%				
						Borderline				
						200				
						119				
						60%				
						Borderline				
						200				
						140				
						70%				
						Satisfactory				
						<a href="#">LEED Observations</a>				
						—				
						—				
						—				
						—				
						<a href="#">Commentary</a>				
						Total				
						1000				
						612				
						61%				
						Borderline				
<a href="#">Enhanced Environmental Hazards Assessment Cost Estimates</a>										
<a href="#">C=Under Contract</a>										
FACILITY ASSESSMENT Cost Set: 2018						Rating	Dollar Assessment			C
A. <a href="#">Heating System</a>						3	\$2,391,266.08			-
B. <a href="#">Roofing</a>						3	\$293,854.00			-
C. <a href="#">Ventilation / Air Conditioning</a>						2	\$5,000.00			-
D. <a href="#">Electrical Systems</a>						3	\$1,137,463.32			-
E. <a href="#">Plumbing and Fixtures</a>						2	\$670,880.00			-
F. <a href="#">Windows</a>						2	\$43,217.00			-
G. <a href="#">Structure: Foundation</a>						1	\$0.00			-
H. <a href="#">Structure: Walls and Chimneys</a>						2	\$190,093.00			-
I. <a href="#">Structure: Floors and Roofs</a>						2	\$934,991.50			-
J. <a href="#">General Finishes</a>						2	\$1,667,766.05			-
K. <a href="#">Interior Lighting</a>						3	\$367,420.00			-
L. <a href="#">Security Systems</a>						3	\$211,739.40			-
M. <a href="#">Emergency/Egress Lighting</a>						3	\$70,084.00			-
N. <a href="#">Fire Alarm</a>						2	\$122,647.00			-
O. <a href="#">Handicapped Access</a>						3	\$684,366.80			-
P. <a href="#">Site Condition</a>						2	\$221,360.80			-
Q. <a href="#">Sewage System</a>						1	\$0.00			-
R. <a href="#">Water Supply</a>						1	\$0.00			-
S. <a href="#">Exterior Doors</a>						3	\$54,200.00			-
T. <a href="#">Hazardous Material</a>						3	\$849,348.40			-
U. <a href="#">Life Safety</a>						2	\$243,763.20			-
V. <a href="#">Loose Furnishings</a>						2	\$140,168.00			-
W. <a href="#">Technology</a>						3	\$786,310.42			-
- X. <a href="#">Construction Contingency / Non-Construction Cost</a>						-	\$2,708,328.15			-
<b>Total</b>							\$13,794,267.12			

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## I. Structure: Floors and Roofs

**Description:** The floor construction of the base floor (basement) of the overall facility is concrete slab on grade type construction, and is in good condition. There is no crawl space. The floor construction of the first and second floors of the 1909 Original Construction is plywood on wood joist) type construction, and is in fair condition. The floor construction of the first and second floors of the 1949 and the 1960 Addition is cast-in-place concrete, and is in good condition. The floor construction of the 1998 Addition is metal decking with concrete topping on steel bar joists, and is in good condition. The 2003 Addition floor construction is precast concrete planks with concrete topping, and is in good condition. Ceiling to structural deck spaces are sufficient to accommodate HVAC, electrical, and plumbing scopes of work in required renovations. The roof construction of the 1909 Original Construction, the 1949 Addition and the 1960 Addition is wood deck on wood joist type construction, and is in fair condition. The roof construction of the 1998 Addition is metal roof deck on steel bar joists. The roof construction of the 2003 Addition is metal roof decking on metal trusses. The soffits and fascia trim throughout the entire facility are wood construction.

**Rating:** 2 Needs Repair

**Recommendations:** Provide replacement for wood joist framing on the first and second floor of the 1909 Original Construction. Provide fire separation assembly for wood roof structure in the Original Construction, the 1949 Addition and the 1960 Addition. Refer to Item U for pricing of fire suppression system for wood structures. Provide cleaning and painting of all wood fascia, soffits and trim. Repair wood trim at all soffits of entries and front canopy. Pricing for canopy repairs included in this section.

Item	Cost	Unit	Whole Building	Original Construction (1909) 32,931 ft²	Classroom Addition (1949) 18,739 ft²	Classroom Addition (1960) 4,170 ft²	Stairwell Addition (1998) 366 ft²	Classroom Addition (2003) 13,878 ft²	Sum	Comments
Replace Wood Floor System	\$45.00	sq.ft. (Qty)		15,911 Required					\$715,995.00	
Fire Rated Drywall over Existing Wood Ceiling Joists	\$3.50	sq.ft. (Qty)		15,911 Required	9,164 Required	2,092 Required			\$95,084.50	(per square feet of required drywall)
Repair Soffits:	\$24.00	sq.ft. (Qty)		2,620 Required	991 Required	282 Required		1,270 Required	\$123,912.00	
<b>Sum:</b>			\$934,991.50	\$834,563.50	\$55,858.00	\$14,090.00	\$0.00	\$30,480.00		



Soffit at 1949 South Elevation



Soffit at 1949 and 1909 Intersection

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## L. Security Systems

**Description:**

The overall facility contains a CCTV (Honeywell) and Door access control security system, installed in 2015 and in good condition. Motion detectors are not provided in main entries, central gathering areas, offices, main Corridors, and spaces where 6 or more computers are located. Door contacts are provided in the Main entry, and (4) exterior doors. An automatic visitor control system is not provided. The Administrative office is not located adjacent to the Main Entrance to the facility and though a secure Entrance vestibule is not provided, the Main Entry is equipped with Door Buzzer Entry system and CCTV camera monitored and controlled by a computer in the Administrative office. Compliant color CCTV cameras are provided at main entry areas, parking lots, central gathering areas, and main Corridors. CCTV is monitored in Administrative Area with the use of a LCD monitor, computer based recording device. A compliant computer controlled access control system integrating alarms and video signals, with appropriate UPS backup, is provided. The system is not equipped with card / biometric readers. The security system is not adequately provided throughout, and the system is not fully compliant with Ohio School Design Manual guidelines. There are no playground fencing issues requiring attention. The exterior site lighting system is equipped with surface mount wall pack, HID metal halide at entry lights in poor condition. Pedestrian walkways are illuminated with surface mount round pendant, HID metal halide fixtures in poor condition. Parking pick-up / drop off areas are not illuminated. The exterior site lighting system provides inadequate illumination due to insufficient fixture capacity.

**Rating:**

3 Needs Replacement

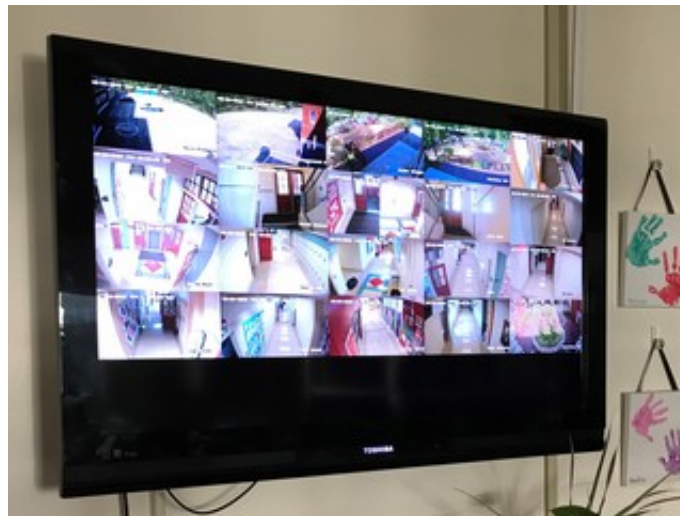
**Recommendations:**

Provide **complete replacement of security system** to meet Ohio School Design Manual guidelines. Provide **complete replacement of exterior site lighting** system to meet Ohio School Design Manual guidelines. Provide **Secure Entrance Vestibule at Main Entry** to the facility. The allowance is based upon adding three sets of double doors and wall system to deny access to the school at the split-level stair at the main entry.

Item	Cost	Unit	Whole Building	Original Construction (1909)	Classroom Addition (1949)	Classroom Addition (1960)	Stairwell Addition (1998)	Classroom Addition (2003)	Sum	Comments
				32,931 ft²	18,739 ft²	4,170 ft²	366 ft²	13,878 ft²		
Security System:	\$1.85	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	\$129,655.40	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	\$70,084.00	(complete, area of building)
Other: Secure Entrance Vestibule	\$12,000.00	allowance		Required					\$12,000.00	Add 2 sets of doors and wall system to deny direct access to the school at the Main Entry.
Sum:			\$211,739.40	\$105,853.35	\$53,406.15	\$11,884.50	\$1,043.10	\$39,552.30		



Lighting At Pedestrian Walkway



CCTV Type Security System Monitored In Administrative Area

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## O. Handicapped Access

Description:	<p>At the site, there is not an accessible route provided from the public right-of-way, the accessible parking areas, and from the passenger unloading zone to the main entrance of the school because access to the main entry is facilitated by stairs. There is not an accessible route connecting all or most areas of the site because access to the playground is facilitated by stairs and slides. The exterior entrances are mostly not ADA accessible due to stairs. Access from the parking / drop-off area to the building entries is compromised by steps. Adequate handicap parking is not provided. Exterior doors are not equipped with ADA hardware. Building entrances should be equipped with 3 ADA power assist doors and 2 are currently provided. The main entry requires 1 ADA power assist door opener as well as 2 chair lifts because of the stairs on the interior and exterior that facilitate entry into the building. The 2003 Addition is the best access point for the handicapped because it gives direct access to the elevator and the entry point is not blocked by stairs. This entry has 2 power assist doors (one at the main entry and one at the vestibule door) and they are in fair condition. Playground layout and equipping are not compliant because the playground is inaccessible and equipment/playground surface does not meet ADA requirements. On the interior of the building, space allowances and reach ranges are mostly not compliant. There is an accessible route through the building which does not include protruding objects. Ground and floor surfaces are compliant. Ramps and stairs do meet all ADA requirements. Elevation changes within the overall facility are facilitated by 8 compliant stairwells in good condition, 1 compliant lifts in fair condition, and 1 compliant ramp in good condition. Special provisions for floor level changes in this 2 story structure have been appropriately addressed by a ramp, chairlift, and a compliant elevator in the 2003 addition that is in good condition. Access to the Stage is facilitated by a Corridor at Stage level. The only portion of the facility that is not accessible is the Auditorium space. The existing ramp connects the stage and the cafeteria, but does not provide access to the Auditorium seating area. Interior doors in the 1909 Original Construction, 1949, 1960 and 1998 Additions are not recessed, are not provided adequate clearances, and are not provided with ADA-compliant hardware. Interior doors in the 2003 Addition are a combination of recessed and non-recessed, are provided adequate clearances, and are provided with ADA-compliant hardware. 18 ADA-compliant toilets are required, and 4 are currently provided. 18 ADA-compliant Restroom lavatories are required, and 12 are currently provided. 0 ADA-compliant Science Classroom lab sinks are required, and 0 are currently provided. 4 ADA-compliant urinals are required, and 14 are currently provided. 0 ADA-compliant showers are required, and 0 are currently provided. 6 ADA-compliant electric water coolers are required, and 2 are currently provided. In the 1909 Original Construction, 1949, and 1960 Additions, toilet partitions are plastic, and do not provide appropriate ADA clearances. ADA-compliant accessories are not adequately provided and mounted. In the 2003 Addition, toilet partitions are plastic, and do provide appropriate ADA clearances. ADA-compliant accessories are adequately provided and mounted. Mirrors do meet ADA requirements for mounting heights. Science Classrooms are compliant with ADA requirements. Health Clinic and Special Education Restrooms are not compliant with ADA requirements due to size. ADA signage is only provided on the interior and exterior of the building in the 2003 Addition.</p>
Rating:	3 Needs Replacement
Recommendations:	<p>Provide ADA-compliant <b>signage, electric water coolers, toilets, sinks, urinals, toilet partitions, doors and frames, door hardware</b> in the 1909 Original Construction, 1949, 1960, and 1998 Additions to facilitate the school's meeting of ADA requirements. Provide new ADA-compliant signage in the 2003 Addition. <b>Parking issues are corrected in Item P.</b> Provide <b>2 new power assist door openers at east entry</b> of the 2003 Addition. Provide <b>1 new power assist door opener at the main entry</b> in the 1909 Original Construction. Provide <b>2 chair lifts for the main entry - one interior and one exterior.</b> Replace existing chair lift in the 1909 Original Construction due to age. In the 1949 Addition, enlarge both staff <b>Restrooms</b> and the Restroom in the Art Room to allow for ADA spatial clearances. In the boys group Restroom of the 1949 Addition, remove 1 urinal to make room for an ADA stall that accommodates required ADA spatial clearances. In the girls group Restroom of the 1949 Addition, remove 1 toilet to make room for an ADA stall that accommodates required ADA spatial clearances. In the 1909 Original Construction, enlarge both staff Restrooms, the clinic Restroom, and the Restroom located inside a Classroom to allow for ADA spatial clearances. In the 1909 Original Construction, remove 1 toilet in the girl's Locker Room, girl's Restroom, and boy's Locker Room to make room for an ADA stall that accommodates required ADA spatial clearances. Provide funding to rework doorways and Corridor walls to accommodate ADA standards as needed throughout the overall facility. <b>Refer to Item P - Site Condition for funding regarding playground and accessibility renovations.</b></p>

Item	Cost	Unit	Whole Building	Original Construction (1909) 32,931 ft²	Classroom Addition (1949) 18,739 ft²	Classroom Addition (1960) 4,170 ft²	Stairwell Addition (1998) 366 ft²	Classroom Addition (2003) 13,878 ft²	Sum	Comments
Signage:	\$0.20	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	\$14,016.80	(per building area)
Lifts:	\$15,000.00	unit		3 Required					\$45,000.00	(complete)
Electric Water Coolers:	\$1,800.00	unit		3 Required	2 Required				\$9,000.00	(replacement double ADA)
Electric Water Coolers:	\$3,000.00	unit		4 Required	4 Required				\$24,000.00	(new double ADA)
Toilet/Urinals/Sinks:	\$3,800.00	unit		20 Required	4 Required	4 Required			\$106,400.00	(new ADA)
Toilet Partitions:	\$1,000.00	stall		3 Required	2 Required				\$5,000.00	(ADA - grab bars, accessories included)
ADA Assist Door & Frame:	\$7,500.00	unit		1 Required				2 Required	\$22,500.00	(openers, electrical, patching, etc)
Replace Doors:	\$1,300.00	leaf		35 Required	17 Required	7 Required			\$76,700.00	(standard 3070 wood door, HM frame, door/light, includes hardware)
Replace Doors:	\$5,000.00	leaf		1 Required	2 Required				\$15,000.00	(rework narrow opening to provide 3070 wood door, HM frame, door/light, includes hardware)
Replace Doors:	\$5,000.00	leaf		22 Required	15 Required	1 Required			\$190,000.00	(rework opening and corridor wall to accommodate ADA standards when door opening is set back from edge of corridor and cannot accommodate a wheelchair.)
<b>Other:</b> Enlarge Restrooms to Accommodate ADA	\$25,000.00	each		4 Required	3 Required				\$175,000.00	Enlarge Restroom to accommodate ADA requirements. (Cost includes removal of existing and new ADA toilet and sink)
<b>Other:</b> Remove Toilet Fixture	\$200.00	each		3 Required	2 Required				\$1,000.00	Remove toilet fixture for ADA spatial allowances. Cover/patch wall as needed.
<b>Other:</b> Remove Toilet Partition	\$150.00	each		3 Required	2 Required				\$750.00	Remove toilet partition for ADA spatial allowances.
Sum:			\$684,366.80	\$417,036.20	\$219,347.80	\$30,134.00	\$73.20	\$17,775.60		



Existing Chair Lift



Typical Restroom in 1909 Original Construction

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## U. Life Safety

### Description:

The 1909 Original Construction, the 1949 Addition, the 1960 Addition and the 1998 Addition are not equipped with an automated fire suppression system. The 2003 Addition is equipped with a compliant automated fire suppression system in good condition, with a fire service entrance sized for the overall school. Exit Corridors are situated such that dead-end Corridors are not present. The facility features 5 interior stair towers, 4 of which are not protected by a two-hour fire enclosure. Guardrails are not at the correct height and do not extend past the top and bottom stair risers as required by the Ohio Building Code. The Kitchen hood is in fair condition, and is not equipped with the required UL 300 compliant wet chemical fire suppression system. The required 6" overhang of the cooking equipment is not provided by the hood. Kitchen hood exhaust ductwork is not of proper construction and not installed as required by the OSDM and OBCMC. The cooking equipment is not interlocked to shut down in the event of discharge of the fire suppression system. Fire extinguishers are provided in sufficient quantity. Existing fire extinguishers are adequately spaced. The facility is not equipped with an emergency generator. The existing water supply is provided by a tie-in to the municipal system, and is sufficient to meet the future fire suppression needs of the school. Rooms with a capacity greater than 50 occupants are equipped with adequate egress.

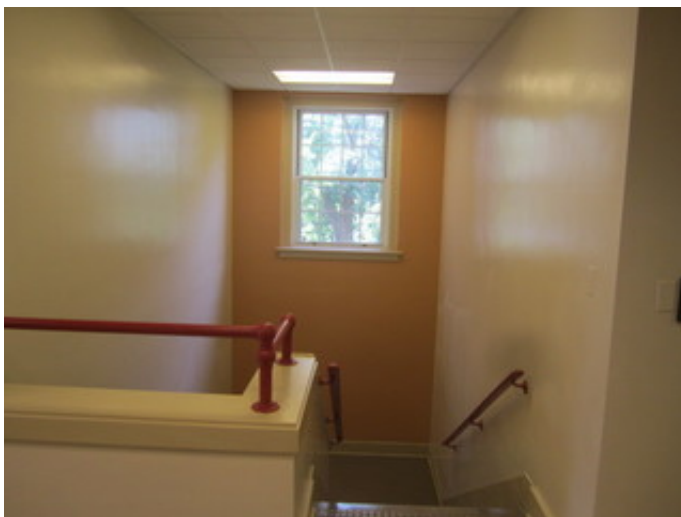
### Rating:

2 Needs Repair

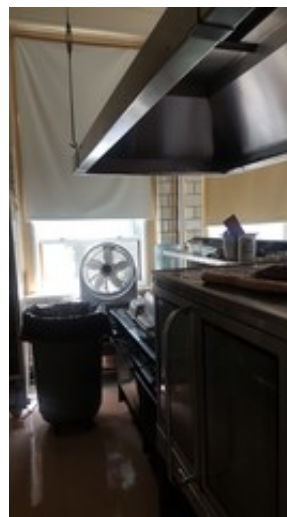
### Recommendations:

Provide a new automated fire suppression system to meet Ohio School Design Manual guidelines in the 1909 Original Construction and the 1949, 1960 and 1998 Additions. Provide new emergency generator, with funding provided via complete replacement of electrical system in Item D. Provide new handrails to meet the requirements of the Ohio Building Code in the 1909 Original Construction and the 1949 Addition. Replace kitchen hood as noted in Item J. Provide interlock to de-energize cooking equipment upon discharge of the Kitchen hood fire suppression system. Provide emergency generator with funding provided via complete replacement of electrical system in Item D.

Item	Cost	Unit	Whole Building	Original Construction (1909) 32,931 ft²	Classroom Addition (1949) 18,739 ft²	Classroom Addition (1960) 4,170 ft²	Stairwell Addition (1998) 366 ft²	Classroom Addition (2003) 13,878 ft²	Sum	Comments
Sprinkler / Fire Suppression System:	\$3.20	sq.ft. (Qty)		26,279 Required	14,908 Required	4,097 Required	138 Required	12,004 Required	\$183,763.20	(includes increase of service piping, if required)
Generator:	\$50,000.00	unit		1 Required	0 Required	0 Required	0 Required	0 Required	\$50,000.00	(75 KW w/fence and pad/day tank only, life safety only)
Handrails:	\$5,000.00	level		2 Required					\$10,000.00	
Sum:			\$243,763.20	\$144,092.80	\$47,705.60	\$13,110.40	\$441.60	\$38,412.80		



Interior Stairway



Kitchen Hood

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**E.D. Smith Elementary**, which is not on the National Register of Historic Buildings, and originally constructed in 1928, is a 3 story, 54,713 square foot brick and stone school building located in a suburban, residential setting. There have been two additions to the facility in 1968 and 2003. The existing facility features a conventionally partitioned design, and does not utilize modular buildings. The structure of the overall facility contains masonry type exterior wall construction, with masonry and plaster type wall construction in the interior. The floor system of the base floor of the overall facility is concrete slab on grade. The floor system of the intermediate floors in the Original Construction consists of site cast concrete. The floor system of the intermediate floors in the 1968 Addition and the 2003 Addition consists of precast planks on steel beams. The **roof structure in the Original Construction is a combination of site cast concrete and wood framing**. The roof structure for the 1968 Addition is steel bar joists. The roof structure for the 2003 Addition is a combination of precast concrete roof deck and steel framing. The roofing system of the Original Construction is slate, installed in 1928 over 89 years ago, and TPO membrane installed in 2010, over 7 years ago. The roofing system of 1968 Addition is slate, installed in 1968 over 49 years ago, and modified bitumen installed in 2010, over 7 years ago. The roofing system of the 2003 Addition is slate, installed in 2003 over 14 years ago, and TPO membrane installed in 2003, over 14 years ago. The ventilation system of the building is inadequate to meet the needs of the users. The Classrooms are undersized in terms of the current standards established by the State of Ohio. Physical Education and Student Dining spaces consist of one 7,334 SF Primary Gymnasium and separate Student Dining. The electrical system for the facility is generally inadequate. **The facility is not equipped with a fully compliant security system**. The **Original Construction and the 1968 Addition are equipped with a non-compliant manual fire alarm system**. The 2003 Addition is equipped with a compliant automatic fire alarm system. The Original Construction and the 1968 Addition are not equipped with an automated fire suppression system. The 2003 Addition is equipped with an automated fire suppression system. The building is not reported to contain asbestos and other hazardous materials. The **Original Construction and 1968 Addition are not compliant with ADA accessibility requirements**. The 2003 Addition is compliant with ADA accessibility requirements. The school is located on a 3-acre site adjacent to residential properties. The property and playgrounds are partially fenced for security. Access onto the site is unrestricted. Site circulation is poor. There is no dedicated space for school buses to load and unload on the site, but the School District does not have bussing for students. Parking for staff, visitors and community events is inadequate and only available by street parking. There is a large area for bicycle parking on site for students and staff.

*No Significant Findings*

























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## Building Summary - Edwin D Smith Elem (34694)

<b>District:</b> Oakwood City				<b>County:</b> Montgomery		<b>Area:</b> West Central Ohio (2)	
<b>Name:</b> Edwin D Smith Elem				<b>Contact:</b> Ms. Lynn Cowell			
<b>Address:</b> 1701 Shafor Blvd Dayton, OH 45419				<b>Phone:</b> (937) 297-5335			
<b>Bldg. IRN:</b> 34694				<b>Date Prepared:</b> 2017-08-24		<b>By:</b> Paul W. Garland	
				<b>Date Revised:</b> 2018-03-09		<b>By:</b> Paul Brown	

Current Grades		PK, 1-6	Acreage:		3.00	Suitability Appraisal Summary			
Proposed Grades		N/A	Teaching Stations:		36				
Current Enrollment		458	Classrooms:		34				
Projected Enrollment		N/A							
Addition		Date	HA	Number of Floors	Current Square Feet	<div> <div>Section</div> <div>Points Possible</div> <div>Points Earned</div> <div>Percentage</div> <div>Rating</div> <div>Category</div> </div>			
Original Construction		1928	no	3	54,713	<div> <div>Cover Sheet</div> <div>—</div> <div>—</div> <div>—</div> <div>—</div> <div>—</div> </div>			
Gymnasium Addition		1968	no	2	16,244	<div> <div>1.0 The School Site</div> <div>100</div> <div>61</div> <div>61%</div> <div>Borderline</div> <div></div> </div>			
Classroom Addition		2003	yes	3	12,606	<div> <div>2.0 Structural and Mechanical Features</div> <div>200</div> <div>107</div> <div>54%</div> <div>Borderline</div> <div></div> </div>			
Total					83,563	<div> <div>3.0 Plant Maintainability</div> <div>100</div> <div>56</div> <div>56%</div> <div>Borderline</div> <div></div> </div>			
						<div> <div>4.0 Building Safety and Security</div> <div>200</div> <div>123</div> <div>62%</div> <div>Borderline</div> <div></div> </div>			
						<div> <div>5.0 Educational Adequacy</div> <div>200</div> <div>121</div> <div>61%</div> <div>Borderline</div> <div></div> </div>			
						<div> <div>6.0 Environment for Education</div> <div>200</div> <div>143</div> <div>72%</div> <div>Satisfactory</div> <div></div> </div>			
						<div> <div>LEED Observations</div> <div>—</div> <div>—</div> <div>—</div> <div>—</div> <div>—</div> </div>			
						<div> <div>Commentary</div> <div>—</div> <div>—</div> <div>—</div> <div>—</div> <div>—</div> </div>			
						<div> <div>Total</div> <div>1000</div> <div>611</div> <div>61%</div> <div>Borderline</div> <div></div> </div>			
						<div> <div>Enhanced Environmental Hazards Assessment Cost Estimates</div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>			

FACILITY ASSESSMENT Cost Set: 2018				Rating	Dollar Assessment	C=Under Contract	
	A.	Heating System		3	\$2,851,169.56		
	B.	Roofing		3	\$378,166.60	Renovation Cost Factor	
	C.	Ventilation / Air Conditioning		3	\$5,000.00	Cost to Renovate (Cost Factor applied)	
	D.	Electrical Systems		3	\$1,356,227.49	The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.	
	E.	Plumbing and Fixtures		3	\$988,099.00		
	F.	Windows		2	\$143,985.00		
	G.	Structure: Foundation		2	\$2,100.00		
	H.	Structure: Walls and Chimneys		2	\$112,694.75		
	I.	Structure: Floors and Roofs		1	\$0.00		
	J.	General Finishes		2	\$2,736,565.75		
	K.	Interior Lighting		3	\$437,815.00		
	L.	Security Systems		3	\$256,154.55		
	M.	Emergency/Egress Lighting		3	\$83,563.00		
	N.	Fire Alarm		3	\$146,235.25		
	O.	Handicapped Access		3	\$748,512.60		
	P.	Site Condition		2	\$336,787.98		
	Q.	Sewage System		1	\$0.00		
	R.	Water Supply		1	\$0.00		
	S.	Exterior Doors		3	\$39,300.00		
	T.	Hazardous Material		3	\$1,310,756.30		
	U.	Life Safety		2	\$208,184.00		
	V.	Loose Furnishings		1	\$0.00		
	W.	Technology		3	\$944,819.19		
	X.	Construction Contingency / Non-Construction Cost		-	\$3,196,982.29		
Total					\$16,283,118.31		

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## I. Structure: Floors and Roofs

**Description:** The floor construction of the base floor of the overall facility is concrete slab on grade type construction, and is in good condition. Basement storage areas are included under the 1928 Original Construction. There is no separate crawl space. The floor construction of the intermediate floors of the 1928 Original Construction is cast in place concrete. The floor construction of the intermediate floors in the 1968 Addition and the 2003 Addition are precast concrete planks with concrete topping type construction, and is in good condition. In the 1928 Original Construction, the ceiling to structural deck spaces are insufficient to accommodate HVAC, electrical and plumbing scopes of work in required renovations. In the 1968 and 2003 Additions, ceiling to structural deck spaces are sufficient to accommodate HVAC, electrical, and plumbing scopes of work in required renovations. **The roof construction of the 1928 Original Construction is wood framing on cast-in-place concrete type construction, and is in good condition.** The roof construction of the 1968 Addition is concrete decking on steel trusses type construction, and is in good condition. The roof construction of the 2003 Addition is metal decking on steel trusses on precast concrete roof deck type construction, and is in good condition.

**Rating:** 1 Satisfactory

**Recommendations:** Refer to Item A for funding of architectural soffits to accommodate HVAC, electrical, and plumbing scopes of work for the 1928 Original Construction.

Item	Cost	Unit	Whole Building	Original Construction (1928)	Gymnasium Addition (1968)	Classroom Addition (2003)	Sum	Comments
				54,713 ft <sup>2</sup>	16,244 ft <sup>2</sup>	12,606 ft <sup>2</sup>		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		



Corridor Floor



Gymnasium Roof

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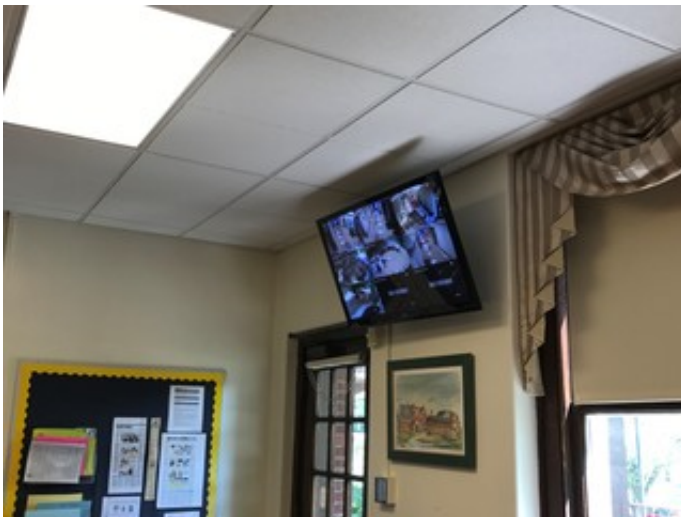
## L. Security Systems

**Description:** The overall facility contains a CCTV (Honeywell), and Door access control security system, installed in 2015 and in good condition. Motion detectors are not provided in main entries, central gathering areas, offices, main Corridors, and spaces where 6 or more computers are located. Exterior doors are not equipped with door contacts, but is equipped with door alarm modules and key pads. An automatic visitor control system is not provided. The Administrative office is not located adjacent to the Main Entrance to the facility and though a secure Entrance vestibule is not provided, the Main Entry is equipped with Door Buzzer Entry system that includes door contacts and CCTV camera monitored and controlled by a computer in the Administrative office. Compliant color CCTV cameras are provided at main entry areas, exterior building perimeter, central gathering areas, and main Corridors. CCTV is monitored in Administrative Area with the use of a LCD monitor, computer based recording device. A compliant computer controlled access control system integrating alarms and video signals, with appropriate UPS backup, is not provided. The system is not equipped with card / biometric readers. The security system is not adequately provided throughout, and the system is not fully compliant with Ohio School Design Manual guidelines. There are no playground fencing issues requiring attention. The exterior site lighting system is equipped with surface mount wall sconce, HID metal halide at entry lights, in poor condition. Pedestrian walkways, Parking pick-up / drop off areas are illuminated with surface mount round pendant, HID metal halide fixtures, in poor condition. The exterior site lighting system provides inadequate illumination due to insufficient fixture capacity and sparse placement of fixtures.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide complete replacement of security system to meet Ohio School Design Manual guidelines. Provide complete replacement of exterior site lighting system to meet Ohio School Design Manual guidelines. Provide Secure Entrance Vestibule at Main Entry to the facility. The allowance is based upon adding three sets of double doors and wall system to deny access to the school at the split-level stair at the main entry.

Item	Cost	Unit	Whole Building	Original Construction (1928)	Gymnasium Addition (1968)	Classroom Addition (2003)	Sum	Comments
Security System:	\$1.85	sq.ft. (of entire building addition)		Required	Required	Required	\$154,591.55	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	Required	Required	\$83,563.00	(complete, area of building)
Other: Secure Entrance Vestibule	\$18,000.00	allowance		Required			\$18,000.00	Interior doors denying access to corridors at the Main Entry.
Sum:			\$256,154.55	\$173,932.05	\$46,295.40	\$35,927.10		



CCTV Monitoring System In Administrative Area



Pedestrian Walkway Lighting

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## O. Handicapped Access

## Description:

At the site, there is not an accessible route provided from the public right-of-way, the accessible parking areas, and from the passenger unloading zone to the main entrance of the school because access to the main entry is facilitated by stairs. There is an accessible route connecting most areas of the site. The exterior entrances are mostly not ADA accessible due to improper hardware and stairs at most entrances. Access from the parking / drop-off area to the building entries is compromised by steps. Adequate handicap parking is not provided. There are a couple parking spots near the only entry that is ADA accessible, but these spots are not specifically designated as handicap spaces. There is not a parking lot accompanying the facility. There is only street parking, which does not provide handicap spaces. Most exterior doors are not equipped with ADA hardware. Building entrances should be equipped with 1 additional ADA power assist door at the main entry of the facility. There is one entry in the 2003 Addition located in the back of the building that has a power assist opener, which is good condition. Playground layout and equipping are not compliant due to having a non-compliant ground surface. On the interior of the building, space allowances and reach ranges are mostly not compliant. There is an accessible route through the building (with the exception of getting to the Stage) which does not include protruding objects. Ground and floor surfaces are compliant. There are not ramps in the facility and stairs do meet all ADA requirements. Elevation changes within the overall facility are facilitated by 5 compliant stairwells in good condition, and 1 compliant lift in good condition. Special provisions for floor level changes in this three story structure are mostly sufficient. This multistory building has a compliant elevator that accesses every floor and is in good condition. The main entry is the only area (with the exception of the Stage) that has insufficient access because it is facilitated by stairs without a lift or a nearby ramp. Access to the Stage is not facilitated by a Corridor at Stage level, chair lift, or ramp. It is facilitated by 10 compliant stairs in good condition and does require a lift. Interior doors in the 1928 Original construction are not recessed, are not provided adequate clearances, and are not provided with ADA-compliant hardware. Interior doors in the 1968 Addition are not recessed, are provided adequate clearances, and are not provided with ADA-compliant hardware. Interior doors in the 2003 Addition are recessed, are provided adequate clearances, and are provided with ADA-compliant hardware. In the 1928 Original Construction 15 ADA-compliant toilets are required, and 5 are currently provided. 15 ADA-compliant Restroom lavatories are required, and 0 are currently provided. 0 ADA-compliant lab sinks are required. 3 ADA-compliant urinals are required, and 0 are currently provided. 1 ADA-compliant shower is required, and 0 are currently provided. 6 ADA-compliant electric water coolers are required, and 2 are currently provided. Toilet partitions are metal or marble, and provide appropriate ADA clearances. ADA-compliant accessories are not adequately provided and mounted. Mirrors meet ADA requirements for mounting heights. In the 1968 Addition 4 ADA-compliant toilets are required, and 0 are currently provided. 4 ADA-compliant Restroom lavatories are required, and 0 are currently provided. 0 ADA-compliant lab sinks are required. 2 ADA-compliant urinals are required, and 0 are currently provided. 2 ADA-compliant showers are required, and 0 are currently provided. 3 ADA-compliant electric water coolers are required, and 1 is currently provided. Toilet partitions are metal, and do not provide appropriate ADA clearances. ADA-compliant accessories are not adequately provided and mounted. Mirrors meet ADA requirements for mounting heights. In the 2003 Addition 8 ADA-compliant toilets are required, and 8 are currently provided. 8 ADA-compliant Restroom lavatories are required, and 14 are currently provided. 0 ADA-compliant Science Classroom lab sinks are required. 3 ADA-compliant urinals are required, and 6 are currently provided. 0 ADA-compliant showers are required. 3 ADA-compliant electric water coolers are required, and 3 are currently provided. Toilet partitions are plastic, and provide appropriate ADA clearances. ADA-compliant accessories are adequately provided and mounted. Mirrors meet ADA requirements for mounting heights. Science Classrooms are compliant with ADA requirements. Health Clinic and Special Education Restrooms are not compliant with ADA requirements due to size and non-compliant fixtures. ADA signage is provided on the interior, but not the exterior of the building.

## Rating:

3 Needs Replacement

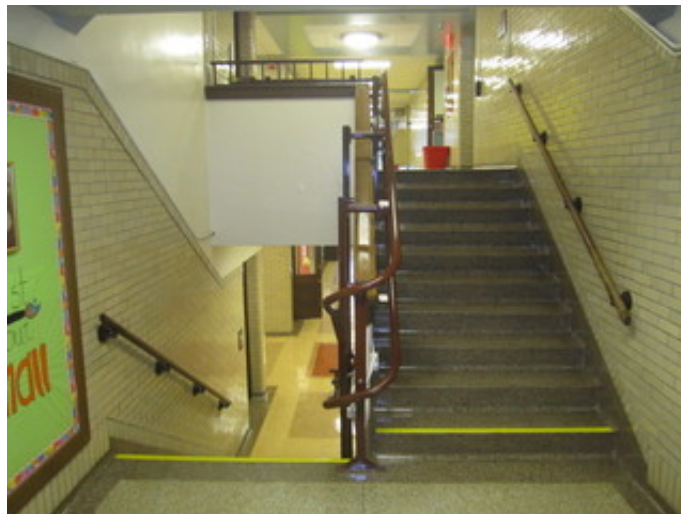
## Recommendations:

Provide ADA-compliant signage, electric water coolers, toilet accessories, toilets, sinks, urinals, toilet partitions, doors and frames, and door hardware in the 1928 Original Construction and 1968 Addition to facilitate the school's meeting of ADA requirements. Parking issues are corrected in Item P. Provide a chair lift for the main entry and 1 power assist door opener to the main entry. Provide 1 chairlift to either side of the Stage in the 1968 Addition. Enlarge Health Clinic and Special Education Restrooms to allow for ADA spatial allowances. Enlarge all staff Restrooms in the 1928 Original Construction to allow for ADA spatial allowances. Reconfigure doorways in the 1928 Original Construction that open into Corridors in order to provide recessed openings with appropriate ADA clearances. Replace remaining doors with doors to match the new Corridor doors in finish, hardware, keying, etc. Provide funding to install ADA shower in or near Health Clinic. Provide ADA shower equipment in existing Locker Room showers of the 1968 Addition. The 2003 Addition requires no renovations at this time.

Item	Cost	Unit	Whole Building	Original Construction (1928) 54,713 ft²	Gymnasium Addition (1968) 16,244 ft²	Classroom Addition (2003) 12,606 ft²	Sum	Comments
Signage:	\$0.20	sq.ft. (of entire building addition)		Required	Required	Required	\$16,712.60	(per building area)
Lifts:	\$15,000.00	unit		2 Required			\$30,000.00	(complete)
Electric Water Coolers:	\$3,000.00	unit		4 Required	2 Required		\$18,000.00	(new double ADA)
Toilet/Urinals/Sinks:	\$3,800.00	unit		23 Required	10 Required		\$125,400.00	(new ADA)
Toilet/Urinals/Sinks:	\$1,500.00	unit		5 Required			\$7,500.00	(replacement ADA)
Toilet Partitions:	\$1,000.00	stall			2 Required		\$2,000.00	(ADA - grab bars, accessories included)
ADA Assist Door & Frame:	\$7,500.00	unit		1 Required			\$7,500.00	(openers, electrical, patching, etc)
Replace Doors:	\$1,300.00	leaf		43 Required	25 Required		\$88,400.00	(standard 3070 wood door, HM frame, door/light, includes hardware)
Replace Doors:	\$5,000.00	leaf		8 Required			\$40,000.00	(rework narrow opening to provide 3070 wood door, HM frame, door/light, includes hardware)
Replace Doors:	\$5,000.00	leaf		32 Required			\$160,000.00	(rework opening and corridor wall to accommodate ADA standards when door opening is set back from edge of corridor and cannot accommodate a wheelchair.)
Provide ADA Shower:	\$3,000.00	each		1 Required	2 Required		\$9,000.00	(includes fixtures, walls, floor drain, and supply line of an existing locker room)
Provide Toilet Accessories:	\$1,000.00	per restroom		15 Required	4 Required		\$19,000.00	
<b>Other:</b> Enlarge Restroom	\$25,000.00	each		9 Required			\$225,000.00	Enlarge Restroom to accommodate ADA requirements. (Cost includes funding for new fixtures, grab bars, and toilet accessories)
Sum:			\$748,512.60	\$654,242.60	\$91,748.80	\$2,521.20		



Stairs to Main Entry



Existing Chair Lift

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## U. Life Safety

### Description:

The 1928 Original Construction and the 1968 Addition are not equipped with an automated fire suppression system. The 2003 Addition is equipped with a compliant automated fire suppression system in good condition, with a fire service entrance sized for the overall school. Exit Corridors are situated such that dead-end Corridors are not present. The Original Construction features 3 interior stair towers, which are not protected by two-hour fire enclosure. The facility does not have any exterior stairways from intermediate floors. Guardrails are not needed due to stair configuration with walls. Handrails do not extend past the top and bottom stair risers as required by the Ohio Building Code. The Kitchen hood is in fair condition, and is not equipped with the required UL 300 compliant wet chemical fire suppression system. Kitchen hood exhaust ductwork is not of proper construction and/or installed as required by the OSDM and OBCMC. The cooking equipment is not interlocked to shut down in the event of discharge of the fire suppression system. Fire extinguishers are provided in sufficient quantity. Existing fire extinguishers are adequately spaced. The facility is not equipped with an emergency generator. The existing water supply is provided by a tie-in to the municipal system, and is sufficient to meet the future fire suppression needs of the school. Rooms with a capacity greater than 50 occupants are equipped with adequate egress.

### Rating:

2 Needs Repair

### Recommendations:

Provide new automated fire suppression system in the 1928 Original Construction and 1968 Building Additions to meet Ohio School Design Manual guidelines. Provide 2-hour stair enclosures in the 1928 Original Construction. Provide new emergency generator, with funding provided via complete replacement of electrical system in Item D. Provide new kitchen hood, with funding provided via complete replacement in Item J.

Item	Cost	Unit	Whole Building	Original Construction (1928)	Gymnasium Addition (1968)	Classroom Addition (2003)	Sum	Comments
Sprinkler / Fire Suppression System:	\$3.20	sq. ft. (Qty)		54,713 ft²	16,244 ft²	12,606 ft²		
Interior Stairwell Closure:	\$5,000.00	per level		45,171 Required	15,199 Required		\$193,184.00	(includes increase of service piping, if required)
				3 Required			\$15,000.00	(includes associated doors, door frames and hardware)
Sum:			\$208,184.00	\$159,547.20	\$48,636.80	\$0.00		



Fire Extinguisher



Fire Alarm

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**Oakwood Junior / Senior High**, which is not on the National Register of Historic Buildings, and originally constructed in 1927, is a 3 story, 178,238 square foot brick and stone school building located in a suburban setting. There have been five additions to this building in 1932, 1960, 1969, 1989, and 2003. The 1969 Addition is a second floor built on top of the 1960 Addition. The existing facility features a conventionally partitioned design, and does not utilize modular buildings. The structure of the **Original Construction** and the **Additions except a portion of the 2003 Addition** contains masonry type exterior wall construction, with **plaster on either wood or masonry type wall construction in the interior**. The structure of the 2003 Addition is masonry for the Locker Room addition portion, and brick veneer on steel framing on the other Classroom portion, with gypsum board on metal stud wall framing construction in the interior. The floor system consists of cast-in-place concrete for the Original Construction and the 1932, 1960 and 1969 Additions. The floor system consists of a composite metal decking and cast concrete system in the 1989 Addition. The floor system consists of precast concrete planks for the 2003 Addition. **The roof structure is wood framing and steel trusses for the 1927 Original Construction, the 1932 Addition and the 1969 Addition**. The roof structure for the 1989 Addition consists of a composite metal decking and cast concrete system. The roof structure for the 2003 Addition is precast concrete planks. The roofing system of the Original Construction and the 1932 Addition is fully adhered membrane on the low-slope portion and slate on the high-pitched portions. The roofing system of the 1969 Addition is either a modified bitumen or a fully adhered membrane. The roofing system for the 1989 is a fully adhered roof membrane. The roofing system of the 2003 Addition is fully adhered membrane on the low-slope portion and slate on the high-pitched portions. All of the slate roof and modified bitumen areas are from the time of their construction, which puts them between 14 and 90 years old. The areas of roof membrane were installed in either 1998 or 2003, which makes them between 14 and 19 years old. The ventilation system of the building is inadequate to meet the needs of the users. The General Classrooms are undersized in terms of the current standards established by the State of Ohio. Physical Education and Student Dining spaces consist of 5,380 SF Primary Gymnasium with 4,480 SF Auxiliary Gymnasium and separate Student Dining. The electrical system for the facility is inadequate. The facility is equipped with a **non-compliant security system**. The building has a **non-compliant automatic fire alarm system**. The facility is **not equipped with an automated fire suppression system except in the 2003 Addition only**. The building is reported to contain asbestos per a 2001 Hazardous Materials report. The School District has not provided an updated report as to whether the asbestos was removed. The **overall building is not compliant with ADA accessibility requirements**. The school is located on a 5-acre site adjacent to residential properties. The athletic facilities are located across the street on a separate 7-acre site. The property and athletic facilities are partially fenced for security. Access onto the site is unrestricted. Site circulation is poor. There is no dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is inadequate. Due to the size and proximity of this school in its community, there is no student bussing, so dedicated space for school buses is not warranted.

Career Tech Programs are paired with the neighboring school district, Kettering.

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## Building Summary - Oakwood Jr./Sr. High ()

<b>District:</b> Oakwood City				<b>County:</b> Montgomery		<b>Area:</b> West Central Ohio (2)	
<b>Name:</b> Oakwood Jr./Sr. High				<b>Contact:</b> Paul Waller (HS) & Tim Badenhop (Jr. High)			
<b>Address:</b> 1200 Far Hills Avenue Dayton, 45419				<b>Phone:</b> HS-(937) 297-5325 / Jr. High - (937) 297-5328			
<b>Bldg. IRN:</b>				<b>Date Prepared:</b> 2017-08-23		<b>By:</b> Paul W. Garland	
				<b>Date Revised:</b> 2018-03-09		<b>By:</b> Paul Brown	

Current Grades	7-12	Acreage:	5.00	Suitability Appraisal Summary				
Proposed Grades	N/A	Teaching Stations:	75					
Current Enrollment	1062	Classrooms:	68					
Projected Enrollment	N/A							

	Date	HA	Number of Floors	Current Square Feet	Section	Points Possible	Points Earned	Percentage	Rating	Category
<u>Original Construction</u>	1927	no	3	76,823	<u>Cover Sheet</u>	—	—	—	—	—
<u>Auditorium Fixed Seating</u>	1927	no	1	4,706	<u>1.0 The School Site</u>	100	64	64%	Borderline	
<u>Addition 1</u>	1932	no	2	44,332	<u>2.0 Structural and Mechanical Features</u>	200	122	61%	Borderline	
<u>Addition 2</u>	1960	no	1	15,790	<u>3.0 Plant Maintainability</u>	100	56	56%	Borderline	
<u>Addition 3</u>	1969	no	2	21,881	<u>4.0 Building Safety and Security</u>	200	131	66%	Borderline	
<u>Addition 4</u>	1989	yes	3	550	<u>5.0 Educational Adequacy</u>	200	139	70%	Satisfactory	
<u>Addition 5</u>	2003	yes	2	14,156	<u>6.0 Environment for Education</u>	200	152	76%	Satisfactory	
<b>Total</b>				<b>178,238</b>	<u>LEED Observations</u>	—	—	—	—	—
					<u>Commentary</u>	—	—	—	—	—
					<b>Total</b>	<b>1000</b>	<b>664</b>	<b>66%</b>	<b>Borderline</b>	

<b>Enhanced Environmental Hazards Assessment Cost Estimates</b>			
	*HA = Handicapped Access		<b>C=Under Contract</b>
	*Rating =1 Satisfactory		
	=2 Needs Repair		
	=3 Needs Replacement		
	*Const P/S = Present/Scheduled Construction		
Renovation Cost Factor		98.97%	
Cost to Renovate (Cost Factor applied)		\$28,544,206.62	
The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.			

FACILITY ASSESSMENT			Dollar
Cost Set: 2018			Assessment C
A.	<u>Heating System</u>	3	\$6,081,480.56 -
B.	<u>Roofing</u>	3	\$1,050,611.10 -
C.	<u>Ventilation / Air Conditioning</u>	1	\$0.00 -
D.	<u>Electrical Systems</u>	3	\$2,892,802.74 -
E.	<u>Plumbing and Fixtures</u>	3	\$1,522,907.00 -
F.	<u>Windows</u>	2	\$94,705.00 -
G.	<u>Structure: Foundation</u>	2	\$608.00 -
H.	<u>Structure: Walls and Chimneys</u>	2	\$267,331.25 -
I.	<u>Structure: Floors and Roofs</u>	2	\$86,793.00 -
J.	<u>General Finishes</u>	2	\$3,842,878.15 -
K.	<u>Interior Lighting</u>	3	\$941,690.00 -
L.	<u>Security Systems</u>	3	\$542,978.30 -
M.	<u>Emergency/Egress Lighting</u>	3	\$178,238.00 -
N.	<u>Fire Alarm</u>	3	\$311,916.50 -
O.	<u>Handicapped Access</u>	3	\$861,947.60 -
P.	<u>Site Condition</u>	2	\$385,622.00 -
Q.	<u>Sewage System</u>	1	\$0.00 -
R.	<u>Water Supply</u>	1	\$0.00 -
S.	<u>Exterior Doors</u>	3	\$173,100.00 -
T.	<u>Hazardous Material</u>	3	\$1,943,048.50 -
U.	<u>Life Safety</u>	2	\$575,062.40 -
V.	<u>Loose Furnishings</u>	2	\$178,238.00 -
W.	<u>Technology</u>	3	\$1,246,698.32 -
- X.	<u>Construction Contingency / Non-Construction Cost</u>	-	\$5,662,615.30 -
<b>Total</b>			<b>\$28,841,271.72</b>

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## I. Structure: Floors and Roofs

**Description:** The floor construction of the base floor of the overall facility is concrete slab on grade type construction, and is in good condition. There is no crawl space. The floor system consists of cast-in-place concrete for the Original Construction and the 1932, 1960 and 1969 Additions, in good condition. The floor system consists of a composite metal decking and cast concrete system in the 1989 Addition, in good condition. The floor system consists of precast concrete planks for the 2003 Addition, in good condition. Ceiling to structural deck spaces are sufficient to accommodate HVAC, electrical, and plumbing scopes of work in required renovations except for the third floor of the 1927 Original Construction. The roof structure is wood framing and steel trusses for the 1927 Original Construction, the 1932 Addition and the 1969 Addition, in good condition. The roof structure for the 1989 Addition consists of a composite metal decking and cast concrete system in good condition. The roof structure for the 2003 Addition is precast concrete planks.

**Rating:** 2 Needs Repair

**Recommendations:** Refer to Item A for funding of architectural soffits to accommodate HVAC, electrical, and plumbing scopes of work. **Refer to Item U for pricing of fire suppression system for wood structures. Provide fire rated drywall assembly to the bottom of the wood roof framing areas of the 1927 Original Construction.**

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating (1927) 4,706 ft²	Original Construction (1927) 76,823 ft²	Addition 1 (1932) 44,332 ft²	Addition 2 (1960) 15,790 ft²	Addition 3 (1969) 21,881 ft²	Addition 4 (1989) 550 ft²	Addition 5 (2003) 14,156 ft²	Sum	Comments
Fire Rated Drywall over Existing Wood Ceiling Joists	\$3.50	sq.ft. (Qty)		6,699 Required	18,099 Required						\$86,793.00	(per square feet of required drywall)
Sum:			\$86,793.00	\$23,446.50	\$63,346.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		



Third Floor Corridor of 1927 Original Construction



Orchestra Room Roof Structure on Third Floor of 1927 Original Construction

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## L. Security Systems

**Description:**

The overall facility contains a CCTV (Honeywell), Door access control security system (Digital Security) in good condition. The security system keypad (Magnum Alert), is not in operation. Motion detectors are not provided in main entries, central gathering areas, offices, and main Corridors. One motion detector is provided, but not in operation in space where 6 or more computers are located. Exterior doors are not equipped with door contacts, but are equipped with door alarm modules. An automatic visitor control system is not provided. The Administrative office for the Junior High school is located adjacent to the Main Entrance to the facility and though a secure Entrance vestibule is not provided, the Main Entry is equipped with FOB entry door system with door contacts, and CCTV camera monitored and controlled by a computer in the Administrative office. The Administrative office for the High school is located adjacent to the Main Entrance to the facility and though a secure Entrance vestibule is not provided, the Main Entry is equipped with door buzzer entry door system with door contacts, and CCTV camera monitored and controlled by a computer in the Administrative office. Compliant color CCTV cameras are provided at main entry areas, exterior building perimeter, central gathering areas, and main Corridors. CCTV is monitored in Administrative Area with the use of a LCD monitor, computer based recording device. A compliant computer controlled access control system integrating alarms and video signals, with appropriate UPS backup, is provided. The system is not equipped with card / biometric readers. The security system is not adequately provided throughout, and the system is not fully compliant with Ohio School Design Manual guidelines. There is no playground in this location. The exterior site lighting system is equipped with surface mounted wall packs, HID metal halide around the perimeter of building, T-8 fluorescent recessed downlight and surface mount decorative wall sconce fixture type lighting at each exterior door, in fair condition. Pedestrian walkways are illuminated with surface mount decorative pendant, HID metal halide, in fair condition. Parking pick-up / drop off areas are not illuminated. The exterior site lighting system provides inadequate illumination due to insufficient fixture capacity and sparse placement of fixtures.

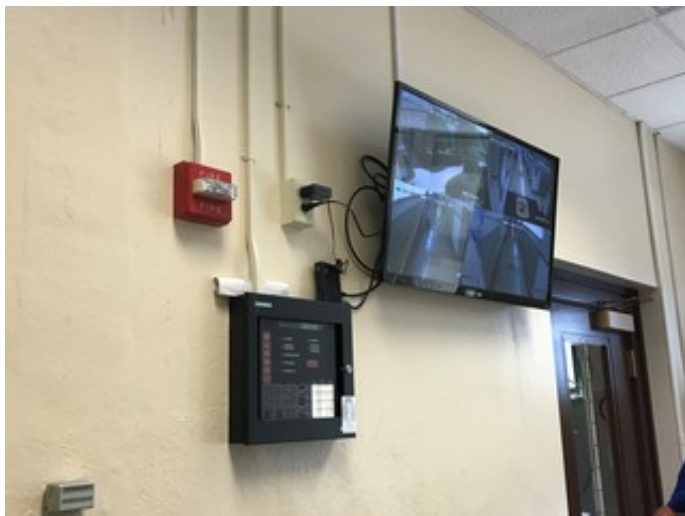
**Rating:**

3 Needs Replacement

**Recommendations:**

Provide **complete replacement of security system** to meet Ohio School Design Manual guidelines. Provide complete **replacement of exterior site lighting system** to meet Ohio School Design Manual guidelines. Provide **Secure Entrance Vestibule at Main Entry to the High School**. Allowance to install an interior frame and glazing enclosure at the front entry directly adjacent to the main office. The Junior High School entry is currently arranged as a secure entry vestibule and requires no additional work besides the OSDM security system upgrades.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating (1927) 4,706 ft²	Original Construction (1927) 76,823 ft²	Addition 1 (1932) 44,332 ft²	Addition 2 (1960) 15,790 ft²	Addition 3 (1969) 21,881 ft²	Addition 4 (1989) 550 ft²	Addition 5 (2003) 14,156 ft²	Sum	Comments
Security System:	\$1.85	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	\$329,740.30	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	\$178,238.00	(complete, area of building)
Other: Secure Entrance Vestibule	\$35,000.00	allowance			Required						\$35,000.00	High School Main Office
Sum:			\$542,978.30	\$13,412.10	\$253,945.55	\$126,346.20	\$45,001.50	\$62,360.85	\$1,567.50	\$40,344.60		



CCTV Monitoring System In Admin Office



Exterior Lighting At Entry

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## O. Handicapped Access

### Description:

At the site, there is an accessible route provided from the public right-of-way, the accessible parking areas, and from the passenger unloading zone to the main entrance of the school. There is an accessible route connecting all areas of the site. The exterior entrances are mostly not ADA accessible due to stairs. Access from the parking / drop-off area to the building entries is compromised by steps. Adequate handicap parking is not provided. Exterior doors are not equipped with ADA hardware. Building entrances should be equipped with 3 ADA power assist doors and 1 is provided in the 2003 Addition, which is in fair condition. Provide 2 new ADA power assist door to either side of the east side of the 1932 Addition. No playground issues were considered due to existing grade configuration. On the interior of the building, space allowances and reach ranges are mostly compliant. There is an accessible route through the building which does include protruding objects. Ground and floor surfaces are compliant. Ramps and stairs do meet all ADA requirements. Elevation changes within the overall facility are facilitated by 7 compliant stairwells in good condition, 1 compliant lift in fair condition, 2 compliant ramps in good condition. This multistory building has 2 compliant elevators that access every floor and they are in good condition. Access to the Stage is facilitated by a Corridor at Stage level. Interior doors in the 1927 Original Construction are not recessed, are not provided adequate clearances, and are provided with ADA-compliant hardware. Interior doors in the 1960 and 2003 Additions are recessed, are provided adequate clearances, and are provided with ADA-compliant hardware. Interior doors in the rest of the facility are not recessed, are not provided adequate clearances, and are not provided with ADA-compliant hardware. In the 1927 Original Construction, 11 ADA-compliant toilets are required, and 2 are currently provided. 11 ADA-compliant Restroom lavatories are required, and 3 are currently provided. 5 ADA-compliant urinals are required, and 6 are currently provided. 0 ADA-compliant showers are required, and 0 are currently provided. Toilet partitions are metal, and do not provide appropriate ADA clearances. ADA-compliant accessories are not adequately provided and mounted. Mirrors do not meet ADA requirements for mounting heights. In the 1932 Addition, 8 ADA-compliant toilets are required, and 4 are currently provided. 8 ADA-compliant Restroom lavatories are required, and 7 are currently provided. 4 ADA-compliant urinals are required, and 5 are currently provided. 0 ADA-compliant showers are required, and 0 are currently provided. Toilet partitions are metal, and do not provide appropriate ADA clearances. ADA-compliant accessories are not adequately provided and mounted. In the 1960 Addition 6 ADA-compliant lab sinks are required and 0 are currently provided. In the 1969 Addition, 4 ADA-compliant toilets are required, and 2 are currently provided. 4 ADA-compliant Restroom lavatories are required, and 2 are currently provided. 1 ADA-compliant urinal is required, and 0 are currently provided. 0 ADA-compliant showers are required, and 0 are currently provided. Toilet partitions are metal, and do provide appropriate ADA clearances. ADA-compliant accessories are adequately provided and mounted. In the 2003 Addition, 10 ADA-compliant toilets are required, and 8 are currently provided. 10 ADA-compliant Restroom lavatories are required, and 16 are currently provided. 4 ADA-compliant urinals are required, and 4 are currently provided. 5 ADA-compliant showers are required, and 8 are currently provided. Toilet partitions are metal, and do provide appropriate ADA clearances. ADA-compliant accessories are adequately provided and mounted. Mirrors throughout the overall facility do meet ADA requirements for mounting heights. 10 ADA-compliant electric water coolers are required throughout the overall facility, and 15 are currently provided. Science Classrooms are not compliant with ADA requirements due to lack of ADA-compliant lab sinks. Health Clinic and Special Education Restrooms are not compliant with ADA requirements due to size. ADA signage is only provided in the 2003 Addition and not adequately provided throughout the rest of the facility.

### Rating:

3 Needs Replacement

### Recommendations:

Provide ADA-compliant signage, power assist door openers, toilets, sinks, urinals, toilet partitions, doors and frames, and door hardware in the overall facility to facilitate the school's meeting of ADA requirements. Parking issues are corrected in Item P. Provide funding to enlarge existing Restrooms that are undersized to meet ADA spatial requirements. Provide funding to reconfigure existing Large Group Restrooms that do not have an ADA stall to accommodate a new ADA stall. Replace existing lift due to age and condition.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating (1927) 4,706 ft²	Original Construction (1927) 76,823 ft²	Addition 1 (1932) 44,332 ft²	Addition 2 (1960) 15,790 ft²	Addition 3 (1969) 21,881 ft²	Addition 4 (1989) 550 ft²	Addition 5 (2003) 14,156 ft²	Sum	Comments
Signage:	\$0.20	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	\$35,647.60	(per building area)
Lifts:	\$15,000.00	unit				1 Required					\$15,000.00	(complete)
Electric Water Coolers:	\$1,800.00	unit				4 Required					\$7,200.00	(replacement double ADA)
Electric Water Coolers:	\$3,000.00	unit			2 Required			1 Required			\$9,000.00	(new double ADA)
Toilet/Urinals/Sinks:	\$3,800.00	unit			18 Required	18 Required		9 Required		13 Required	\$220,400.00	(new ADA)
Toilet Partitions:	\$1,000.00	stall			6 Required	4 Required					\$10,000.00	(ADA - grab bars, accessories included)
ADA Assist Door & Frame:	\$7,500.00	unit				2 Required				1 Required	\$22,500.00	(openers, electrical, patching, etc)
Replace Doors:	\$1,300.00	leaf			108 Required	81 Required	27 Required	40 Required	4 Required	24 Required	\$369,200.00	(standard 3070 wood door, HM frame, door/light, includes hardware)
Provide Toilet Accessories:	\$1,000.00	per restroom			10 Required	6 Required		4 Required		8 Required	\$28,000.00	
<b>Other:</b> Enlarge Restrooms to accommodate ADA .	\$15,000.00	each			2 Required	3 Required					\$75,000.00	Enlarge Restroom to accommodate ADA requirements.
<b>Other:</b> Group Restroom Reconfiguration	\$17,500.00	each			4 Required						\$70,000.00	Reconfigure Group Restrooms to meet ADA requirements for spatial allowances (per Restroom).
Sum:			\$861,947.60	\$941.20	\$346,164.60	\$274,766.40	\$38,258.00	\$97,576.20	\$5,310.00	\$98,931.20		



Typical Restroom



Elevator

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## U. Life Safety

## Description:

The overall facility except for the 2003 Addition is not equipped with an automated fire suppression system. The automatic fire suppression system in the 2003 Addition is in good condition. Exit Corridors are situated such that dead-end Corridors are not present. The facility features 11 interior stair towers, which are not protected by two-hour fire enclosures. The facility features 1 exterior steel stairway providing egress from intermediate floors, which is in fair condition. Guardrails in the 1927 Original Construction are part of the wall construction or are constructed of vertical bars, and do not extend past the top and bottom stair risers as required by the Ohio Building Code. Guardrails in the 1932 Addition and the 1969 Addition are constructed of vertical bars, and do not extend past the top and bottom stair risers as required by Ohio Building Code. The Kitchen hood is in fair condition, and is equipped with the required UL 300 compliant wet chemical fire suppression system. The required 6" overhang of the cooking equipment is provided by the hood. Kitchen hood exhaust ductwork is of proper construction and/or installed as required by the OSDM and OBCMC. The cooking equipment is not interlocked to shut down in the event of discharge of the fire suppression system. Fire extinguishers are provided in sufficient quantity. Existing fire extinguishers are adequately spaced. The facility is not equipped with an emergency generator. The existing water supply is provided by a tie-in to the city system, and is sufficient to meet the future fire suppression needs of the school. Rooms with a capacity greater than 50 occupants are equipped with adequate egress.

## Rating:

2 Needs Repair

## Recommendations:

Provide an automated fire suppression system in the Original Construction, 1932, 1960, 1969 and 1989 Building Additions to meet Ohio School Design Manual guidelines. According to OBC 1019.3.4, if a building in Use Group E is only 2 stories and has a sprinkler system, the stairways do not need to be rated. Provide rated enclosures in the 3-story 1927 Original Construction, which also has a 2-hour separation from the other Additions. Provide new emergency generator, with funding provided via complete replacement of electrical system in Item D. Provide new handrails to meet the requirements of the Ohio Building Code for the 1927 Original Construction, the 1932 Addition and the 1969 Addition. Provide interlock to de-energize cooking equipment upon discharge of the Kitchen hood fire suppression system. Funding for a new Kitchen hood is provided in Item J.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating (1927)	Original Construction (1927)	Addition 1 (1932)	Addition 2 (1960)	Addition 3 (1969)	Addition 4 (1989)	Addition 5 (2003)	Sum	Comments
				4,706 ft <sup>2</sup>	76,823 ft <sup>2</sup>	44,332 ft <sup>2</sup>	15,790 ft <sup>2</sup>	21,881 ft <sup>2</sup>	550 ft <sup>2</sup>	14,156 ft <sup>2</sup>		
Sprinkler / Fire Suppression System:	\$3.20	sq.ft. (Qty)		4,706 Required	76,823 Required	44,332 Required	15,790 Required	21,881 Required	550 Required		\$525,062.40	(includes increase of service piping, if required)
Interior Stairwell Closure:	\$5,000.00	per level			3 Required						\$15,000.00	(includes associated doors, door frames and hardware)
Handrails:	\$5,000.00	level			3 Required	2 Required		2 Required			\$35,000.00	
Sum:			\$575,062.40	\$15,059.20	\$275,833.60	\$151,862.40	\$50,528.00	\$80,019.20	\$1,760.00	\$0.00		



Stairway in 1927 Original Construction



Kitchen Hood and Range

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