

ADEL DESOTO MINBURN

COMMUNITY SCHOOL DISTRICT
MASTER PLANNING REPORT



frk architects + engineers

September, 2013

Master Planning Study

ADM Community School District

September, 2013

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The following documents are available at the District website:

- Master Planning Facility Committee Meeting Minutes
- Master Planning Options
- Master Planning Costing Options
- Report on Decommissioned Minburn Elementary
- Report on Decommissioned Adel 6 -7

Introduction

ADM Community School District Master Planning Committee

After a few years of declining or steady student enrollment, the Adel DeSoto Minburn (ADM) School District has been experiencing growth in numbers, with projections for increased enrollment for the foreseeable future. **frk architects + engineers** was enlisted in the summer of 2012 to begin working with the District to provide Master Planning services to explore options for consideration to address the expected growth and to explore other District facility improvements. The Master Planning process initially involved meetings with the District administrative staff with regular reporting to the School Board. In the winter of 2012/2013 a District Master Planning Committee was formed. The recommendations of this report reflect the hard work and dedication of the Master Planning Committee.

ADM Master Planning Facility Committee Members:

- Dave Baccus
- Ron Brenner
- Jenny Felt
- Nick Hasty
- Eric Hetiz,
- Karen Jacobsen
- Kevin Juhnke
- John Kelly
- Ben Madison
- Shirley McAdon
- Butch Ostrander
- Mike Pace
- Jim Peters
- Pat Steele

ADM Community School District Representatives:

- Greg Dufoe, Superintendent of Schools
- Nancy Gee, Business Manager
- Doug Gee, Activities Director
- Carole Erickson, Adel Elementary Principal
- Jodi Banse, DeSoto Intermediate Principal
- Kim Timmerman, ADM Middle School Principal
- Lee Griebel, ADM High School Principal
- Kim Roby, School Board Vice President
- Kelli Book, School Board Member

frk architects + engineers:

- Tom Wollan, Project Architect
- Dave Briden, Principal in Charge

Additional Resources

RSP & Associates Enrollment Report 2012/2013

RSP & Associates, a demographic firm from Kansas City, provided an in-depth study of the enrollment projections for the next 10 years for the District in 2012. References to numbers provided by RSP are from their Enrollment Report.

ICAT Facility Review and Recommendations

In 2009 the ADM Community School District engaged the Iowa Construction Advocate Team (ICAT) to complete a thorough study of the existing District facilities. Due to the declining enrollment numbers reported in this study, one of the results of this study was the recommendation to decommission two attendance centers: Minburn Elementary and Adel Middle School. Additional information provided by this report included recommendations about the existing facilities' infrastructure and capital improvements needs. The current Master Planning Committee used this ICAT report to inform their recommendations.

Overview of the ADM School District Facilities

The District currently has 6 attendance centers:

1. Adel Elementary

- Located in Adel
- Serves Kindergarten through 2nd Grade
- 20 General Education Classrooms

2. DeSoto Intermediate

- Located in DeSoto
- Serves 3rd Grade through 5th Grade
- 15 General Education Classrooms

3. ADM Middle School

- Located in Adel in a shared facility with the High School
- Serves 6th Grade through 8th Grade
- 15 General Education Classrooms

4. ADM High School

- Located in Adel in a shared facility with the Middle School
- Serves 9th Grade through 12th Grade
- Contains 20 General Education Classrooms
- Campus contains athletic venues and auditorium

5. Decommissioned Minburn Elementary

- Located in Minburn
- Closed for three years
- Most recently served elementary students
- Contains 7 General Education Classrooms

- Gymnasium still used for athletic program
- 6. Decommissioned Adel Middle School**
 - Located in Adel
 - Closed for three years
 - Most recently used for 6th and 7th Grade Students
 - Contains 14 General Education Classrooms
 - Gymnasium still used for athletic program

District Ideal Classroom Size

The District has a policy regarding the preferred number of students per classroom, which is as follows:

- Kindergarten: 18/19 students per class
- Grades 1-3: 18/19 students per class
- Grades 4-5: 20/22 students per class
- Grades 6-12: 24/26 students per class

This ideal classroom size is based on sound educational philosophy and informs student capacity for each attendance center. Research on classroom size supports the ADM School District's ideal classroom size. AdvancED, the Educational Resources Information Center, and the AIA Knowledge Community on Education are a few of the many organizations that support the District's goal. According to the AIA, ideal classroom sizes are 18 students for Kindergarten and 1st Grade, 20 students for 2nd and 3rd Grade, 22 students for 4th and 5th Grade, and 25 students for 6th through 12th Grade. Rather than fit more students into existing classrooms as the student population increases, additional space will need to be identified to accommodate student growth.

In terms of actual Building SF allocation for students, the 2007/2008 National Center for Education Statistics indicates a range of 150 SF/student for elementary schools and 160 SF/student for high schools. (School Planning and Management, May 2006). What these numbers represent is dividing the SF of the entire school's program space by the school's classroom capacity, which in the case of the ADM School District is represented by the ideal classroom size as discussed above. Other research spreads that number wider, with ranges from 111 SF/student for elementary schools to 225 SF/student for high schools (CEFPI - Council of Educational Facility Planners International, US Department of Education, School Planning and Management). Research indicates that as the number of students in a facility gets smaller, the SF/student number becomes larger. This reflects the fact that there is an economy of scale at play: the support services for students (cafeteria, media center, locker rooms, circulation) become more efficient when serving more students.

An analysis of the ADM School District's facilities indicates that the actual SF/student number for each building is below national averages, with the exception of Minburn Elementary. Minburn Elementary has been a K-12 attendance center in the past, which is not needed for the elementary school program. Therefore, the SF/student number is higher than the average.

Another SF number which is a helpful tool in analyzing the school's facility performance is the SF/student per classroom. The SF/student number for classrooms in existing, older school buildings will generally be smaller than SF numbers for newer construction since the average size of a classroom has been steadily rising, in other words newer buildings will have larger classrooms than older buildings.

Current standards are 900 SF to 950 SF per classroom. Given this number, using ADM School District's ideal class size, the following ideal space allocations per student would be applicable:

- Elementary: 950 SF/19 Students = 50 SF/Student
- Intermediate: 950 SF/22 Students = 43 SF/Student
- Middle School: 950 SF/26 Students = 37 SF/Student
- High School: 950 SF/26 Students = 37 SF/Student

Analysis of the ADM School District's facilities indicates that the SF/Student number per classroom is toward the low end, reflecting the age of some of the buildings. The average general education high school classroom size at ADM High School is 775 SF. The average classroom size in the 1925 building at DeSoto Intermediate is 785 SF.

We thus have two helpful numbers to analyze the amount of space allocated per student in school buildings: overall building SF/student and individual classroom SF/student. For the ADM School District these numbers are as follows (based on maximum ideal District capacity):

- 1. Adel Elementary**
 - Building Program SF per student: 112 SF/Student (below average)
 - Average Individual Classroom SF for Kindergarteners: 67 SF/Student (above average)
 - Average Individual Classroom SF for 1st and 2nd Graders: 44 SF/Student (below average)
- 2. DeSoto Intermediate**
 - Building Program SF per student: 109 SF/Student (below average)
 - Average Individual Classroom SF: 37 SF/Student (below average)
- 3. ADM Middle School**
 - Building Program SF per student: 143 SF/Student (below average)
 - Average Individual Classroom SF: 37 SF/Student (average)
- 4. ADM High School**
 - Building Program SF per student: 133 SF/Student (below average)
 - Average Individual Classroom SF: 30 SF/Student (below average)
- 5. Decommissioned Minburn Elementary**
 - Building Program SF per student: 256 SF/Student (above average)
 - Average Individual Classroom SF: 40 SF/Student (below average)
- 6. Decommissioned Adel Middle School**
 - Building Program SF per student: 80 SF/Student (below average)
 - Average Individual Classroom SF: 30 SF/Student (below average)

Master Planning Study Report

This study is divided into two parts: First, the study evaluates the current status of each attendance center in sections devoted to each building. Second, recommendations are offered for the most efficient and educationally effective use of the District's facilities.

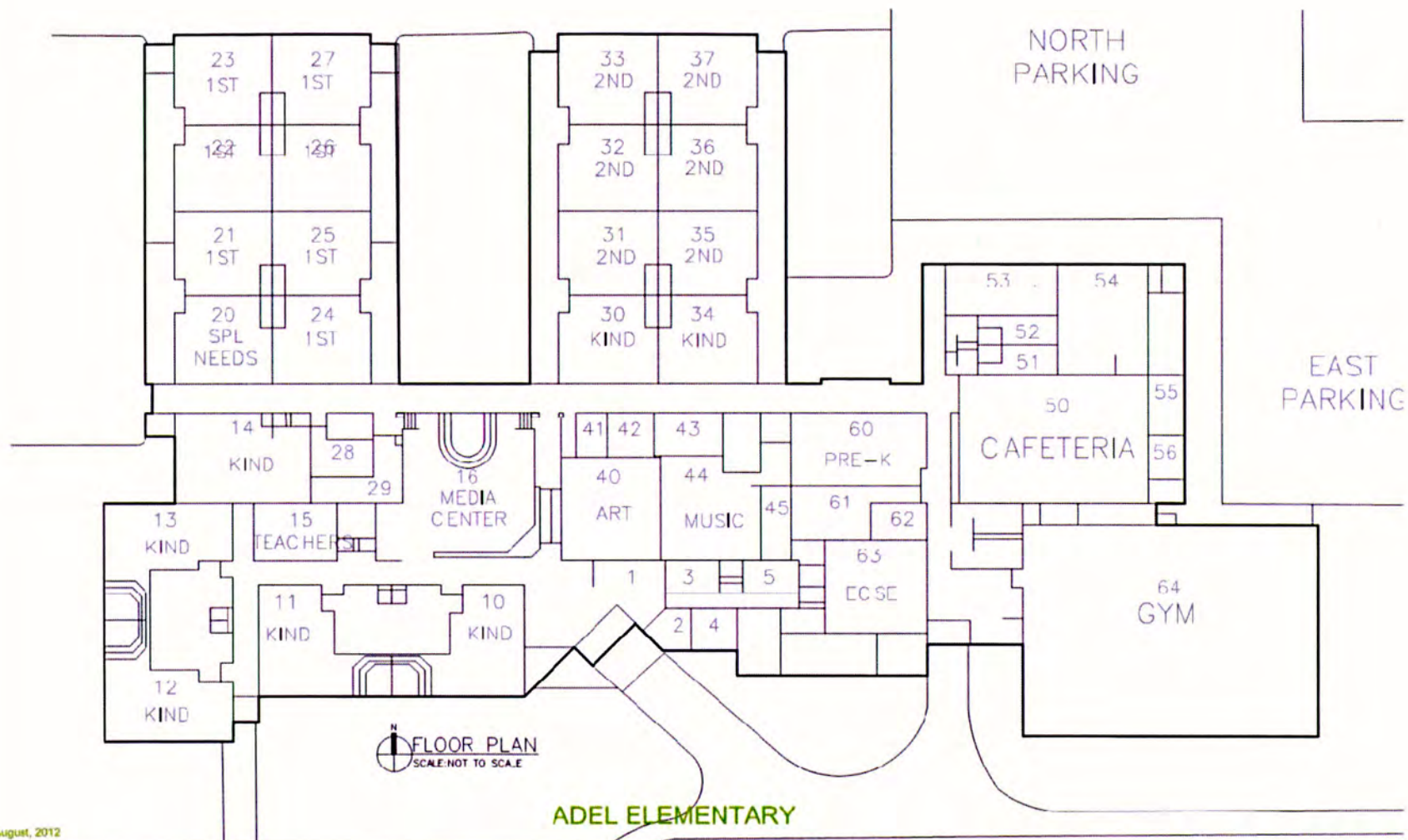
Part One

Evaluation of District Facilities

Adel Elementary

Building Facts

- Location: Adel
- Construction
 - Original building, 1965. Original building houses classrooms, kitchen and cafeteria (former gymnasium).
 - Additions and renovations completed in 1969, 1990, and 2006. Additions house administration, gymnasium, media center, preschool, and classrooms.
- General Education Classrooms: 20
- 2012/2013 Enrollment: 377
- Building Total SF: 60,100 SF
- Grossing Factor: 1.4 (circulation, mechanical, storage, toilet rooms)
- Program Space: $60,100 \text{ SF} / 1.4 = 42,929 \text{ SF}$
- Actual Building SF/student: $42,929 \text{ SF} / 380 \text{ Students} = 112 \text{ SF/Student}$ (At maximum District ideal capacity)
- Desired Average Individual Classroom SF/Student: 50 SF/Student (At maximum District ideal capacity)
- Actual Average Individual Classroom SF/Student: 52 SF/Student (67 SF for Kindergarten, 44 SF for 1st and 2nd Grades at maximum District ideal capacity)



August, 2012

frk architects + engineers

MASTERPLANNING STUDY
ADEL DESOTO MINBURN COMMUNITY SCHOOL DISTRICT
DISTRICT OFFICE: ADEL, IOWA

Observations

Current ADM District has a K – 2nd grade Elementary School Configuration. Current ADM Ideal classroom size for Elementary School students is: 18/19 students per classroom for K – 2nd grade.

Kindergarten Program. There are seven kindergarten classrooms at Adel Elementary for the 2012/13 school year. Five of these classrooms are larger sized classrooms than a typical elementary school classroom size, which is appropriate for a classroom serving kindergarten students. The average size of these classrooms is 1,440 SF. One of these classrooms is smaller than the others at 1,018 SF. Two typical elementary sized classrooms are also used for the kindergarten program. These rooms are significantly smaller than the average size for the five already indicated. These two classrooms are 843 SF. They are elementary level sized classrooms serving as kindergarten classrooms. This situation creates a parity issue for the kindergarten program: two classes are significantly smaller than the other five classrooms.

Square Foot Analysis. Based on the District recommended classroom size for kindergarten students, 18/19 students per class, the average SF of classroom space per kindergarten student at Adel Elementary is 67 SF per student at 19 students per class and 71 SF per student at 18 students per class. (8,900 SF divided by 133 ideal capacity). If all the kindergarten classrooms where the average size of the larger classrooms at Adel Elementary, or 1,440 SF, the average SF per student would be higher: 76 SF per student (1,440 SF times 7 classrooms equals 10,080 SF; 10,080 SF divided by 133 students is 76 SF per student).

First/Second Grade Program. There are 13 elementary classrooms at Adel Elementary for the 2012/13 school year; seven 1st grade classrooms and six 2nd grade classrooms. The typical size of each classroom is 843 SF, although some classrooms are slightly smaller. The average classroom size of all 13 classrooms is 831 SF.

Square Foot Analysis. Based on the District recommended classroom size for elementary students, 18/19 students per class, the average SF of classroom space per elementary student at Adel Elementary is 44 SF per student.

Class Size. The chart below illustrates that for the 2012/2013 school year Adel Elementary exceeded the District recommended maximum class size for the Kindergarten and 2nd Grade levels, which is 19 students per classroom. Note: if the low end ideal classroom size figure is used (18 students per class) all grade levels at Adel Elementary would exceed the ideal classroom size. Looking ahead, by the 2016/2017 school year the ideal classroom size is exceeded at all levels by an average of 20% for the high end of the District's ideal classroom size and 24% of the low end of the ideal classroom size.

Existing Adel Elementary Space Allocation – see Chart One

Attendance Center	Program	Space (in SF)	SF Totals	Cap. at District Ideal	SF/Student at Cap.	ACTUAL 12/13	RSP 13/14	RSP 14/15	RSP 15/16	RSP 16/17	RSP 17/18	RSP 18/19	RSP 19/20	RSP 20/21	RSP 21/22	RSP 22/23
Adel Elementary - 21 General Education Classrooms																
	Pre-K	970		27		27	27	27	27	27	27	27	27	27	27	27
	ECSE	1,576	2,546			13	13	13	13	13	13	13	13	13	13	13
	Total Pre-K/ECSC					40	40	40	40	40	40	40	40	40	40	40
(18/19 students/class)	Kindergarten	1,518		19	80											
Average room size:	Kindergarten	1,546		19	81											
1,271	Kindergarten	1,530		19	81											
	Kindergarten	1,540		19	81											
	Kindergarten	1,080		19	57											
	Kindergarten	843		19	44											
	Kindergarten	843	8,900	19	44											
	Low End of District Cap.			126	71	134	135	140	145	151	154	157	160	162	164	168
	High End of District Cap.			133	67	134	135	140	145	151	154	157	160	162	164	168
(18/19 students/class)	First Grade	843		19	44											
Average room size:	First Grade	843		19	44											
832	First Grade	843		19	44											
	First Grade	843		19	44											
	First Grade	843		19	44											
	First Grade	804		19	42											
	First Grade	804	5,823	19	42											
	Low End of District Cap.			126	46	127	134	137	143	149	154	156	155	158	160	161
	High End of District Cap.			133	44	127	134	137	143	149	154	156	155	158	160	161
(18/19 students/class)	Second Grade	843		19	44											
Average room size:	Second Grade	843		19	44											
830	Second Grade	843		19	44											
	Second Grade	843		19	44											
	Second Grade	804		19	42											
	Second Grade	804	4,980	19	42											
	Low End of District Cap.			108	46	116	131	138	142	149	154	156	155	153	161	163
	High End of District Cap.			114	44	116	131	138	142	149	154	156	155	153	161	163
Low End of Ideal Cap.	TOTAL GEN. ED CLASSROOM		19,703	387	51	404	427	442	457	476	489	492	497	500	512	519
High End of Ideal Cap.	TOTAL GEN. ED CLASSROOM		19,703	407	48	404	427	442	457	476	489	492	497	500	512	519
SPECIALS	Special Needs	843	843													
	Guidance	215	215													
	Title I/Reading Recovery	215	215													
	Speech	200	200													
	Art	1,005	1,005													
	Music	1,102	1,102													
	Media Center	2,021	2,021													
	Cafeteria	2,457	2,457													
	Gymnasium	6,160	6,160													

Chart One – Adel Elementary

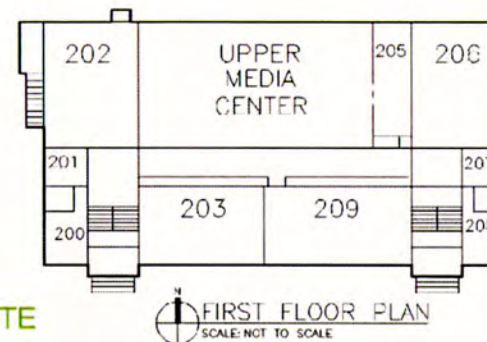
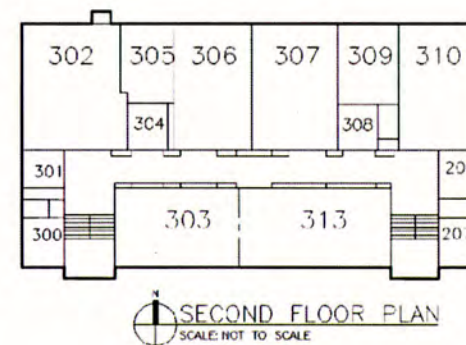
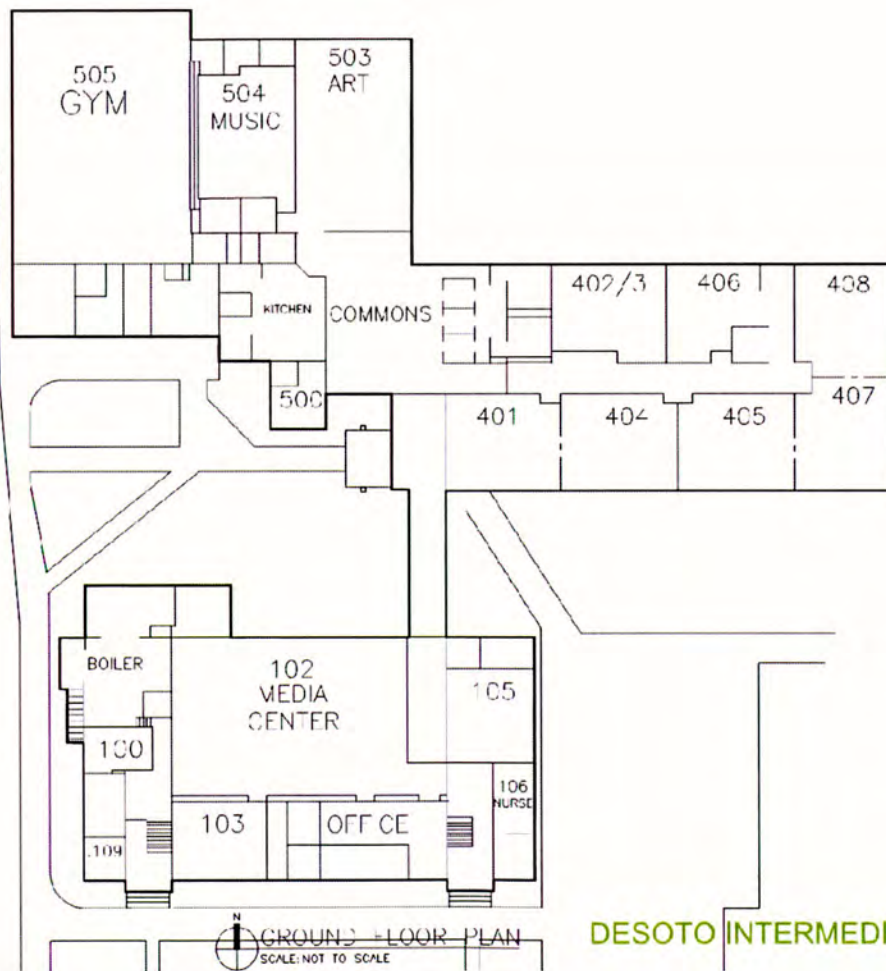
Notes:

- Red infill indicates number of students per classroom exceeds District ideal.
- Low end of District ideal indicates classroom capacity based on 18 students per class.
- High end of District ideal indicates classroom capacity based on 19 students per class.

DeSoto Intermediate

Building Facts

- Location: DeSoto
- Construction:
 - Original building, 1924. Original Building houses media center, administration, and classrooms.
 - Addition and renovation in 1990. Addition houses the gymnasium, art/cafeteria, kitchen, commons, and classrooms.
- General Education Classrooms: 15
- Building Total SF: 48,320 SF
- Main Level: 30,120 SF
- Second Level: 9,190 SF
- Third Level: 9,010 SF
- Grossing Factor: 1.4 (circulation, mechanical, storage, toilet rooms)
- Program Space: $48,320 / 1.4 = 34,516$ SF
- Actual Building SF/student: $34,516 \text{ SF} / 315 \text{ Students} = 109 \text{ SF/Student}$ (At maximum District ideal capacity)
- Desired Average Individual Classroom SF/Student: 43 SF/Student (At maximum District ideal capacity)
- Actual Average Individual Classroom SF/Student: 37 SF/Student (At maximum District ideal)



DESOTO INTERMEDIATE

August, 2012

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MASTERPLANNING STUDY
ADEL DESOTO MINBURN COMMUNITY SCHOOL DISTRICT
DISTRICT OFFICE: ADEL, IOWA

Observations

Current ADM District has a 3rd – 5th grade Intermediate School Configuration. Current ADM ideal classroom size for Intermediate School students is: 18/19 students per classroom for 3rd grade students and 20/22 students per classroom for 4th and 5th grade students.

Square Foot Analysis. Based on the District recommended classroom size for intermediate students, 18/19 students per class for 3rd graders and 20/22 students per class for 4th and 5th graders, the average SF of classroom space per 3rd grade student at DeSoto Intermediate is 41 SF per student at 19 students per class and 44 SF per student at 18 students per class. For 4th and 5th grade students, the average SF of classroom space is 35 SF per student at 22 students per class and 39 SF per student at 20 students per class.

Class Size. The chart below illustrates that for the 2012/2013 school year DeSoto Intermediate exceeded the District recommended maximum class size for the 3rd grade students, which is 19 students per classroom. The 4th grade students were right at capacity at the 22 student per class level. Looking ahead, by the 2016/2017 school year the ideal classroom size is exceeded at all levels.

Existing DeSoto Intermediate School Space Allocation – See Chart Two

Attendance Center	Program	Space (in SF)	SF Totals	Cap. at high District Ideal	SF/Student at Cap.	ACTUAL 12/13	RSP 13/14	RSP 14/15	RSP 15/16	RSP 16/17	RSP 17/18	RSP 18/19	RSP 19/20	RSP 20/21	RSP 21/22	RSP 22/23
Desoto Intermediate - 16 Classrooms																
(18/19 students/class)	Third Grade 202	725		19	38											
Average room size:	Third Grade 206	725		19	38											
787	Third Grade 209	840		19	44											
	Third Grade 407	820		19	43											
	Third Grade 408	825	3,935	19	43											
	Low End of Ideal Cap.			90	44	102	119	135	143	148	154	157	159	158	155	163
	High End of Ideal Cap.			95	41	102	119	135	143	148	154	157	159	158	155	163
(20/22 students/class)	Fourth Grade 302	825		22	38											
Average room size:	Fourth Grade 310	710		22	32											
808	Fourth Grade 313	845		22	38											
	Fourth Grade 404	815		22	37											
	Fourth Grade 405	845	4,040	22	38											
	Low End of Ideal Cap.			100	40	110	102	119	136	146	150	155	160	158	160	157
	High End of Ideal Cap.			110	37	110	102	119	136	146	150	155	160	159	160	157
(20/22 students/class)	Fifth Grade 303	670		22	30											
Average room size:	Fifth Grade 306	700		22	32											
881	Fifth Grade 307	725		22	33											
	Fifth Grade 401	845		22	38											
	Fifth Grade 203	750		22	34											
	Fifth Grade 402	715	4,405	22	33											
	Low End of Ideal Cap.			120	37	117	113	105	124	141	150	154	153	164	160	162
	High End of Ideal Cap.			132	33	117	113	105	124	141	150	154	153	164	160	162
Low End of Ideal Cap.	TOTAL GEN. ED. CLASSROOM		12,380	310	40	329	334	359	403	435	454	466	472	480	475	482
High End of Ideal Cap.	TOTAL GEN. ED. CLASSROOM		12,380	337	37	329	334	359	403	435	454	466	472	480	475	482
SPECIALS	Special Needs 406	750														
	Special Needs 500	270														
	Special Needs 304	460														
	Special Needs 308	530	2,010													
	Guidance 207	120	120													
	Title I/Reading Recovery 307	120	120													
	Speech 201	120	120													
	Art/Cafeteria 503	1,660	1,660													
	Music 504	990	990													
	Media Center 102	2,720	2,720													
	Gymnasium 505	3,500	3,500													

Chart Two – DeSoto Intermediate

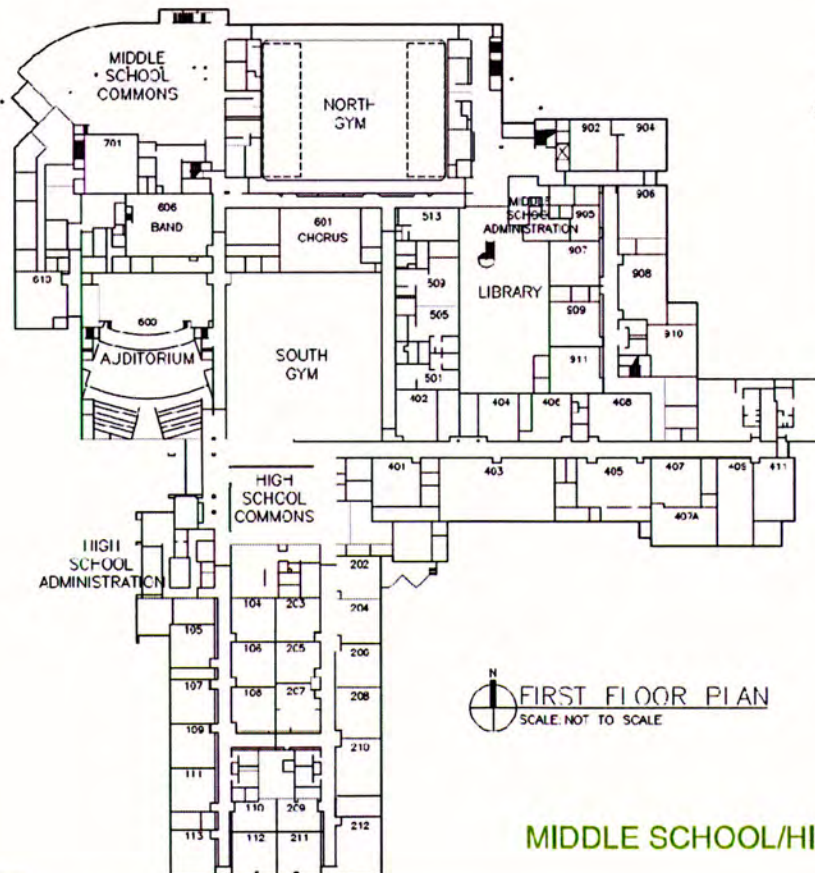
Notes:

- Red infill indicates number of students per classroom exceeds District ideal.
- Low end of District ideal indicates classroom capacity based on 18 or 20 students per class.
- High end of District ideal indicates classroom capacity based on 19 or 22 students per class.

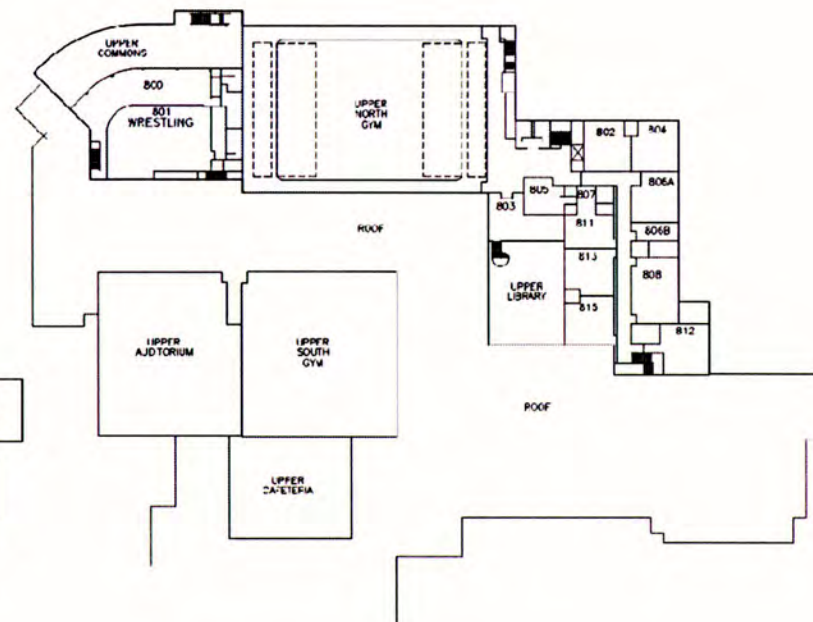
ADM Middle School

Building Facts

- Location: Adel
- Configuration: Building is in a shared attendance center with the High School.
- Construction
 - The Middle School addition to the High School was completed in 2006. The Middle School addition houses Middle School classroom space, the Middle School cafeteria/commons, and additional shared space with the High School and the District.
- Middle School General Education Classrooms: 15
- Building Total SF: 55,810 SF (Middle School Use Only)
- Shared Space with High School: 68,541 SF (includes Music, PE, Athletics, Art, Media Center, Auditorium). Assume Middle School students use one third of the shared space allocation, or 22,620 SF.
- Grossing Factor: 1.4 (circulation, mechanical, storage, toilet rooms)
- Program Space: $78,430 / 1.4 = 56,020$ SF
- Actual Building SF/student: $56,020 \text{ SF} / 390 \text{ Students} = 143 \text{ SF/Student}$ (At maximum District ideal capacity)
- Desired Average Individual Classroom SF/Student: 37 SF/Student (At maximum District ideal capacity)
- Actual Average Individual Classroom SF/Student: 37 SF/Student



FIRST FLOOR PLAN
SCALE: NOT TO SCALE



SECOND FLOOR PLAN
SCALE: NOT TO SCALE

MIDDLE SCHOOL/HIGH SCHOOL

August, 2012

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MASTERPLANNING STUDY
ADEL DESOTO MINBURN COMMUNITY SCHOOL DISTRICT
DISTRICT OFFICE: ADEL, IOWA

Observations

Current ADM District has a 6th through 8th grade Middle School Configuration. Current ADM ideal classroom size for Intermediate School students is: 24/26 students per classroom.

Square Foot Analysis. Based on the District recommended classroom size for Middle School students, the average SF of classroom space per student at ADM Middle School is 40 SF per student at 24 students per class and 37 SF per student at 26 students per class.

Class Size. The chart below illustrates that for the 2012/2013 school year ADM Middle School had adequate space for students. Starting in the 2018/19 school year the student enrollment will exceed available classroom space at the high end of the District ideal classroom size.

Existing ADM Middle School Space Allocation – See Chart Three

Attendance Center	Program	Space (in SF)	SF Totals	Cap. at high District Ideal	SF/Stud at Cap.	ACTUAL 12/13	RSP 13/14	RSP 14/15	RSP 15/16	RSP 16/17	RSP 17/18	RSP 18/19	RSP 19/20	RSP 20/21	RSP 21/22	RSP 22/23
ADM Middle School - 15 Classrooms																
(24/26 students/class)	6th Grade Writing 902	920		26	35											
Average room size:	6th Grade Reading 904	910		26	35											
968	6th Grade Soc Studies 907	910		26	35											
	6th Grade Science 908	1,210		26	47											
	6th Grade Math 909	890		26	34											
	Low End of Ideal Cap.			120		118	117	113	105	125	142	151	155	155	165	163
	High End of Ideal Cap.			130		118	117	113	105	125	142	151	155	155	165	163
Average room size:	7th Grade Writing 804	910		26	35											
988	7th Grade Reading 802	920		26	35											
	7th Grade Math 906	980		26	38											
	7th Grade Geography 806A	900		26	35											
	7th Grade Science 808	1,230		26	47											
	Low End of Ideal Cap.			120		130	123	123	119	111	131	144	153	162	157	172
	High End of Ideal Cap.			130		130	123	123	119	111	131	144	153	162	157	172
Average room size:	8th Grade Writing 811	630		26	24											
895	8th Grade Reading 812	960		26	37											
	8th Grade Social Studies 813	850		26	33											
	8th Grade Science 411	1,145		26	44											
	8th Grade Math 815	890		26	34											
	Low End of Ideal Cap.			120		114	132	126	126	122	114	133	146	155	164	160
	High End of Ideal Cap.			130		114	132	126	126	122	114	133	146	155	164	160
Low End of Ideal Cap.	TOTAL GEN. ED CLASSROOM		14,255	360	40	362	372	362	350	358	387	428	454	472	486	495
High End of Ideal Cap.	TOTAL GEN. ED CLASSROOM		14,255	390	37	362	372	362	350	358	387	428	454	472	486	495
SPECIALS	Project Lead The Way 409	1,260														
	6th Grade Special Needs 905	390														
	7th/8th Special Needs 805	600														
	Middle School Level III 808B	300														
	Art 407	940														
	Computer Lab 910	960														
	Computer Lab 803	1,050														
	Cafeteria	4,870														

Chart Three– ADM Middle School

Notes:

- Red infill indicates number of students per classroom exceeds District ideal.
- Low end of District ideal indicates classroom capacity based on 24 students per class.
- High end of District ideal indicates classroom capacity based on 26 students per class.

ADM High School

Building Facts

- Location: Adel
- Configuration: Building is in a shared attendance center with the Middle School
- Construction
 - Original High School, 1986. The original building houses administration, classrooms, High School cafeteria, gymnasium and auditorium.
 - Addition and Renovation, 2006. The Addition and Renovation included program space for the Middle School, a competition gymnasium, media center, locker rooms, PE and athletic spaces, classrooms, and a District Administration Office complex.
- High School General Education Classrooms: 20
- Building Total SF: 51,837 SF (High School Use Only)
- Shared Space with High School: 68,541 SF (includes Music, PE, Athletics, Art, Media Center, Auditorium). Assume High School students use two thirds of the shared space allocation, or 45,237 SF.
- Grossing Factor: 1.4 (circulation, mechanical, storage, toilet rooms)
- Program Space: $97,074 / 1.4 = 69,340$ SF
- Actual Building SF/student: $69,340 \text{ SF} / 520 \text{ Students} = 133 \text{ SF/Student}$ (At maximum District ideal capacity)
- Desired Average Individual Classroom SF/Student: 37 SF/Student (At maximum District ideal capacity)
- Actual Average Individual Classroom SF/Student: 30 SF/Student (At maximum District idea)

Observations

Current ADM District has a 9th through 12th grade High School Configuration. Current ADM ideal classroom size for High School students is: 24/26 students per classroom.

Square Foot Analysis. Based on the District recommended classroom size for High School students, the average SF of classroom space per student at ADM High School is 32 SF per student at 24 students per class and 30 SF per student at 26 students per class. These numbers fall below the national average for ideal classroom size.

Class Size. The chart below illustrates that for the 2012/2013 school year the High School had adequate space for students. Starting in the 2015/16 school year the student enrollment will exceed available classroom space at the high end of the District ideal classroom size.

Existing ADM High School Space Allocation – See Chart Four

Attendance Center	Program	Space (in SF)	SF Totals	Cap. at high District Ideal	SF/Student at Cap.	ACTUAL 12/13	RSP 13/14	RSP 14/15	RSP 15/16	RSP 16/17	RSP 17/18	RSP 18/19	RSP 19/20	RSP 20/21	RSP 21/22	RSP 22/23
Adel High School - 20 Classrooms																
(24/26 students/class)	Language Arts 108	780		26	30											
Average room size:	Language Arts 111	750		26	29											
775	Language Arts 112	720		26	28											
	Language Arts 113	740		26	28											
	Language Arts 211	710		26	27											
	Foreign Language 104	760		26	29											
	Foreign Language 105	740		26	28											
	Foreign Language 107	740		26	28											
	Social Studies 106	750		26	29											
	Social Studies 203	750		26	29											
	Social Studies 109	750		26	29											
	Math 205	660		26	25											
	Math 207	780		26	30											
	Math 202	740		26	28											
	Math 206	750		26	29											
	Science 208	850		26	33											
	Science 210	980		26	38											
	Science 212	970		26	37											
	Computer 204	750		26	29											
	Business 402	820		26	32											
Low End Ideal Cap.	9th		17,570				116	135	129	130	126	116	132	149	157	167
High End Ideal Cap.	9th		17,570				116	134	129	130	126	116	132	149	157	167
Low End Ideal Cap.	10th		17,250				112	116	134	128	129	125	117	129	146	159
High End Ideal Cap.	10th		17,250				112	116	134	128	129	125	117	129	146	159
Low End Ideal Cap.	11th		16,840				134	116	120	139	133	126	123	118	126	148
High End Ideal Cap.	11th		16,840				134	116	120	139	133	126	123	118	126	148
Low End Ideal Cap.	12th		13,920				109	129	112	118	135	131	124	118	114	124
High End Ideal Cap.	12th		13,920				109	129	112	118	135	131	124	118	114	124
Low End Ideal Cap.	TOTAL GEN. ED CLASSROOM		15,490	480	32	458	471	496	495	515	523	498	496	514	543	598
High End Ideal Cap.	TOTAL GEN. ED CLASSROOM		15,490	520	30	458	471	496	541	515	523	498	496	514	543	598
SPECIALS	FCS 408	1,110														
	FCS 406	780														
	Technology 404	740														
	Chorus 601	2,100														
	Band 606	2,130														
	Project Lead The Way 401	930														
	Art 407A	970														
	Art 405	1,340														
	Industrial Technology 403	2,950														
	TOTAL SPECIALS		13,050													
	Special Needs Level III 911	870														
	Special Needs Level III 911	550														
	Special Needs Level III 911	580														
	Special Needs	630														
	TOTAL SPECIAL NEEDS		2,630													
	At Risk	410														
	Media Center	6,010														
	Cafeteria	4,950														
	North Gym	12,790														
	South Gym	10,150														

Chart Four– ADM High School

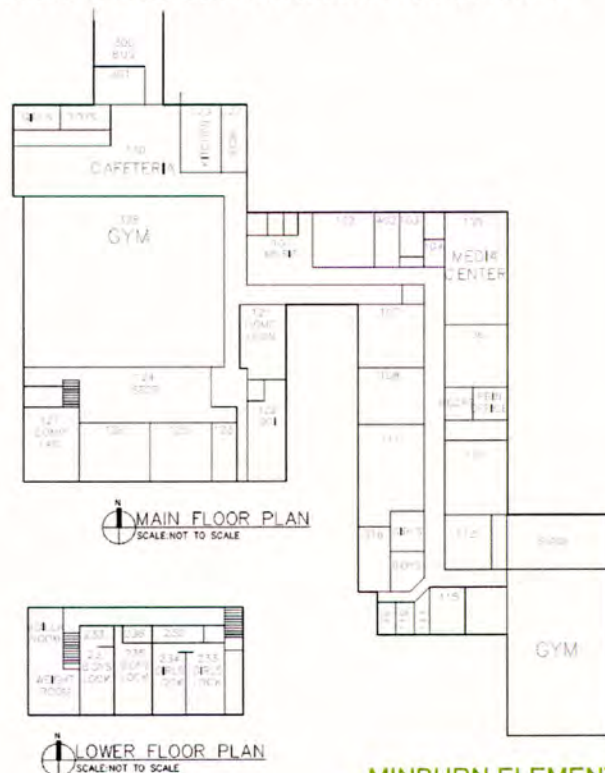
Notes:

- Red infill indicates number of students per classroom exceeds District ideal.
- Low end of District ideal indicates classroom capacity based on 24 students per class.
- High end of District ideal indicates classroom capacity based on 26 students per class.

Decommissioned Minburn Elementary

Building Facts:

- Location: Minburn
- Construction:
 - Original Building, 1956. Original building houses classrooms, administration, and library.
 - Addition and Renovation, 1978. Addition and Renovation houses gymnasium, cafeteria, stage, and classrooms.
- General Education Classrooms: 7 to 10
- Building Total SF: 53,275 SF Total
- 47,585 SF Main Floor
- 5,690 SF Lower Level
- Grossing Factor: 1.4 (circulation, mechanical, storage, toilet rooms)
- Program Space: $53,275 / 1.4 = 38,054$ SF
- Actual Building SF/student: $38,054 \text{ SF} / 133 \text{ Students} = 256 \text{ SF/Student}$ (At maximum District ideal capacity)
- Desire Average Individual Classroom SF/Student: 37 SF/Student (At maximum District ideal capacity)
- Actual Average Individual Classroom SF/Student: 40 SF/Student



MINBURN ELEMENTARY
(DECOMMISSIONED)

UET, 2012

frk architects + engineers

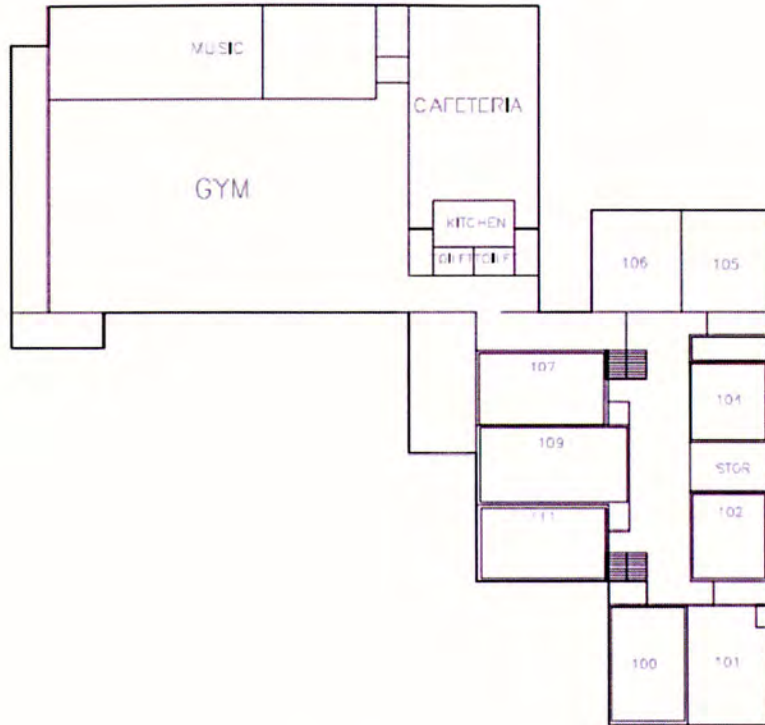
MASTERPLANNING STUDY
ADEL DESOTO MINBURN COMMUNITY SCHOOL DISTRICT
DISTRICT OFFICE: ADEL, IOWA

Decommissioned 6 -7 Middle School

Building Facts:

Location: Adel

- Construction
 - Original Building, 1914. Original Building houses administration, media center, and classrooms.
 - Addition and Renovation, 1952. Addition and Renovation houses gymnasium, music, PE and athletic spaces, kitchen and cafeteria.
- Recent upgrades to interior finishes and electrical system.
- General Education Classrooms: 14
- Building Total SF: 47,500 SF
- 25,150 SF Main Level
- 12,000 SF Second Floor
- 10,350 SF Third Floor
- Grossing Factor: 1.4 (circulation, mechanical, storage, toilet rooms)
- Program Space: $47,500 / 1.4 = 33,400$ SF
- Actual Building SF/Student: $33,400 \text{ SF} / 416 \text{ Students} = 80 \text{ SF/Student}$ (At maximum District ideal capacity)
- Desired Average Individual Classroom SF/Student: 37 SF/Student (At maximum District ideal capacity)
- Actual Average Individual Classroom SF/Student: 30 SF/Student (At maximum District ideal capacity)

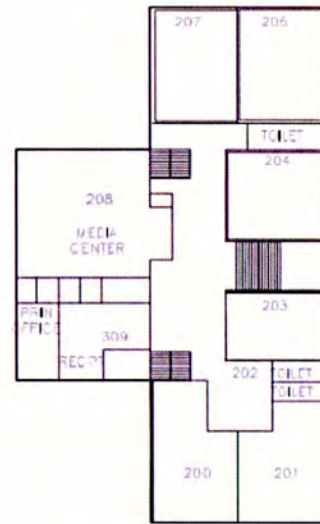


N
MAIN FLOOR PLAN
SCALE: NOT TO SCALE

**ADEL MIDDLE SCHOOL
(DECOMMISSIONED)**

August, 2012

frk architects + engineers



N
SECOND FLOOR PLAN
SCALE: NOT TO SCALE



N
THIRD FLOOR PLAN
SCALE: NOT TO SCALE

MASTERPLANNING STUDY

ADEL DESOTO MINBURN COMMUNITY SCHOOL DISTRICT
DISTRICT OFFICE: ADEL, IOWA

Part Two

Recommendations