

Chamberlain School District Facility Study



Board Review Draft
28 April 2014

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EXECUTIVE SUMMARY

Study Process and Timing

The Chamberlain School District asked Koch Hazard to assist in identifying District needs and in identifying and evaluating options to address them.

Koch Hazard is familiar with Chamberlain School District facilities, having worked with the District to meet a variety of needs since 2003. For this study, Koch Hazard representatives reviewed current facility configurations with District staff, then developed up-to-date existing facility drawings and evaluations.

An initial meeting was conducted on 2 February 2014 with the Chamberlain School District facilities committee to gather information about the District's facility needs, potential facility options and the District's overall goals for the study.

At a second meeting on 6 March 2014, initial findings and planning layouts were reviewed.

Subsequent meetings were conducted on 27 March and 8 April 2014 to review preliminary drafts of the study report.

An updated draft was presented to the Board on 28 April 2014.

A final report, addressing Board comments was delivered on _____ May 2014.

District Facilities Overview

The Chamberlain School District's facilities include:

JK-6 School, located at 301 East Kellam Avenue.

Initially constructed in 1961. With addition in 1978 and 1980, the facility was further updated in 2007.

The school comprises 71,510 s.f. and currently houses 483 students. Its capacity, using unofficial District targets for maximum students per classroom, is 535 students.

The school's layout in two separate buildings connected with a long link and the configuration of one building on three levels raises concerns about student supervision and safety, as well as reduced operational effectiveness.

In spite of a capacity greater than current enrollment, elementary staff voice concerns about lack of flexibility in scheduling space in the building (possibly due to the schools somewhat inefficient layout).

At 53 years of age, the school continues to serve the District well, but requires an ever increasing outlay for maintenance, repairs and replacements.

The school's site, which includes areas of significant slope, creates challenges for playground access.

7 - 12 School, located at 1000 Sorenson Drive.

The 9 – 12 school was constructed in 1993. Grades 7 and 8 were added in 2005, bringing the total area to 81,050 s.f. There is an adjacent shop building of 6,460 s.f.

The school currently houses 414 students and has a capacity of 493.

The 7 – 12 school serves the District well, but lacks adequate facilities for career and technical education, basketball, gymnastics, wrestling and weight training, as well as for theatrical productions and musical concerts.

The school sits on a large flat site that also includes a football and track facility. The site has more than sufficient area to accommodate all District facility needs.

Armory, located at 202 East Kellam Avenue (on the same site as the K-6 school).

Initially constructed in 1957 with additions in 1972, the facility comprises a total of 22,970 s.f. with 2,930 s.f. used exclusively by the South Dakota National Guard and the balance of 20,040 s.f. shared by the Guard and School District.

The Armory hosts School District athletic competitions, plays and concerts as well as graduations and various community events. It also contains an art classroom.

At 57 years of age, the Armory exhibits significant deterioration – masonry cracks, poor windows, etc. - and functional obsolescence – poor locker rooms and lack of accessibility for those with disabilities.

A study outlining various options for improvement of the Armory was completed in 2012. Since then, some needed work (boiler replacement, for example) has commenced.

"White House," located at 301 East Kellam Avenue.

Converted from a residence, likely built in the 1920's, the "White House" houses District Administrative services.

The White House is functionally obsolescent.

Nearby is another small District facility housing the District maintenance services.

Following is a summary of student use facility areas and capacities:

Facility	Area (s.f.)	Current Enrollment	Student Capacity	Area/Student at Capacity
JK-6 School	71,510	483	535	134
7-12 School	87,510	414	493	178
Armory	22,970	N/A	N/A	22
TOTAL	181,990	897	1028	177

Chamberlain School District Enrollment and Space Needs

The Chamberlain School District's enrollment has fluctuated roughly between 850 and 910 students over the last 10 years. The population of Chamberlain has been steady at about 2,300. There is little to suggest that enrollment will change significantly in the foreseeable future.

The District has a number of facility needs. These include:

1. The District has identified student interest in more career and technical education (CTE) opportunities. A CTE Academy at the High School would incorporate existing and new programs:

- Foods and hospitality. Could use the current FACS rooms.
- Health and wellness could use the current AG room.
- Agriculture. Could use the current theatrical shop.
- Horticulture, including a small greenhouse.
- Construction, incorporating woods and metals. Needs a room with 20' clear to structure, a 14' H overhead door and a rail lift.

This Academy would be located at the north end of the high school (involving the demolition of the current shop building).

2. The 7-12 school needs additional PE & Athletics space. Currently, all PE programs and gymnastics share the multi-use room with food service. The multi-use room is 55' x 85', so not large enough for a full size basketball court. The District needs a new facility to house basketball, volleyball, gymnastics, wrestling and weight training programs, freeing up the multi-use room for food service and other group activities.

- A new facility should include:
 - A gymnasium accommodating a high school regulation competition basketball court (50' x 84'), two full size side courts, two regulation volleyball courts (30' x 60') and seating for up to 2,000 spectators.
 - A wrestling room with space for 2 42' x 42' mats.
 - A gymnastics room with space for:
 - Vault: 105' x 8' floor space.
 - Balance Beam: 15'-6" x 45'-6" floor space.
 - Uneven Bars: 13'-2" x 36' floor space.
 - Floor Exercise: 42' x 42' floor space.
 - A weight training room of about 1,400 s.f.
 - Boys and girls locker rooms with toilets and showers and at least 34 lockers each. When added to the existing lockers at the high school, Chamberlain School District will be able to accommodate visiting teams.
 - Lobby, rest rooms and concession space.

3. The District and community need a Performing Arts Center. This facility should include seating for 500, a stage with sufficient space to fly backdrops, a shop/storage

facility and dressing/make up areas. The Performing Arts Center can share public rest rooms and concessions with the gym facility (or vice versa).

4. The District needs to better accommodate its Administrative Team, currently in the "White House". Needed are offices for the Superintendent, the Business Manager and two staff along with a conference room. District Administration should be accessible to the public when other school facilities are closed.

5. The JK-6 school is pressed for space, lacking in flexibility. Moving sixth grade to join seventh and eighth grades would accomplish two goals, freeing up space in the elementary and creating a grade 6-8 middle school environment. To accommodate sixth grade at the 7-8 site would require four classrooms (one science) and a set of rest rooms. The most efficient place to add these at the 7-8 school would be on the north side, using the corridor that already exists.

6. In the longer run, it would be good to have elementary grades (JK-5) at the 6-12 site as well. This would take advantage of operational efficiencies, reducing District operating costs. It would also replace a school that is aging (in 10 years, parts of the school will be over 60 years old. The school is also configured in two buildings and on three levels making it a challenge to supervise) and costing the District more each year in maintenance and repair costs. If grades JK-5 join grades 6-12, some expansion of the food preparation area will be needed.

Having all District programs and facilities together would result in significant District efficiencies and savings:

- a. Staffing
- b. Maintenance
- c. After school programs
- d. Food service

and would enhance educational opportunities for all students.

7. A community room with separate access would be desirable, incorporating DDN capability. The current DDN room is beyond capacity and is unavailable after school hours.

8. Additional maintenance and supply storage is needed at the High School

9. Early childhood programs could expand in the future.

10. The Armory facility needs to be repaired and maintained to meet community needs.

Facility Phasing, Budgeting and Implementation Timing

Facility Planning to address the District's needs has been optimized for implementation phasing based on available funding.

Proposed Phases are as follows:

Phase	Description	Timing
1	Construct CTE academy, PAC and athletics training facilities	2014-2016
2	Move 6th grade to 7-12 school	2020-2022
3	Construct competition gym facility	2025-2027
Future	Move elementary to 6-12 school site	TBD

Budgets, expressed in 2014 dollars, are expected to be roughly as follows:

Phase	Description	Approximate Budget
1	Construct CTE academy , PAC and athletics training facilities	7,548,000
2	Move 6th grade to 7-12 school	816,000
3	Construct competition gym facility and expand parking	4,312,000
Future	Move elementary to 6-12 school site	9,500,000

Phase 1 Timing

Following is the proposed implementation timing for Phase 1: CTE Academy, PAC and athletics training:

	2014			2015				2016		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Design										
Construction Documents										
Bidding/Negotiation										
Construction-PAC										
Construction-Wrestling/Weights/Gymnastics										
Construction-CTE										

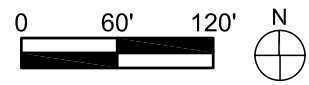
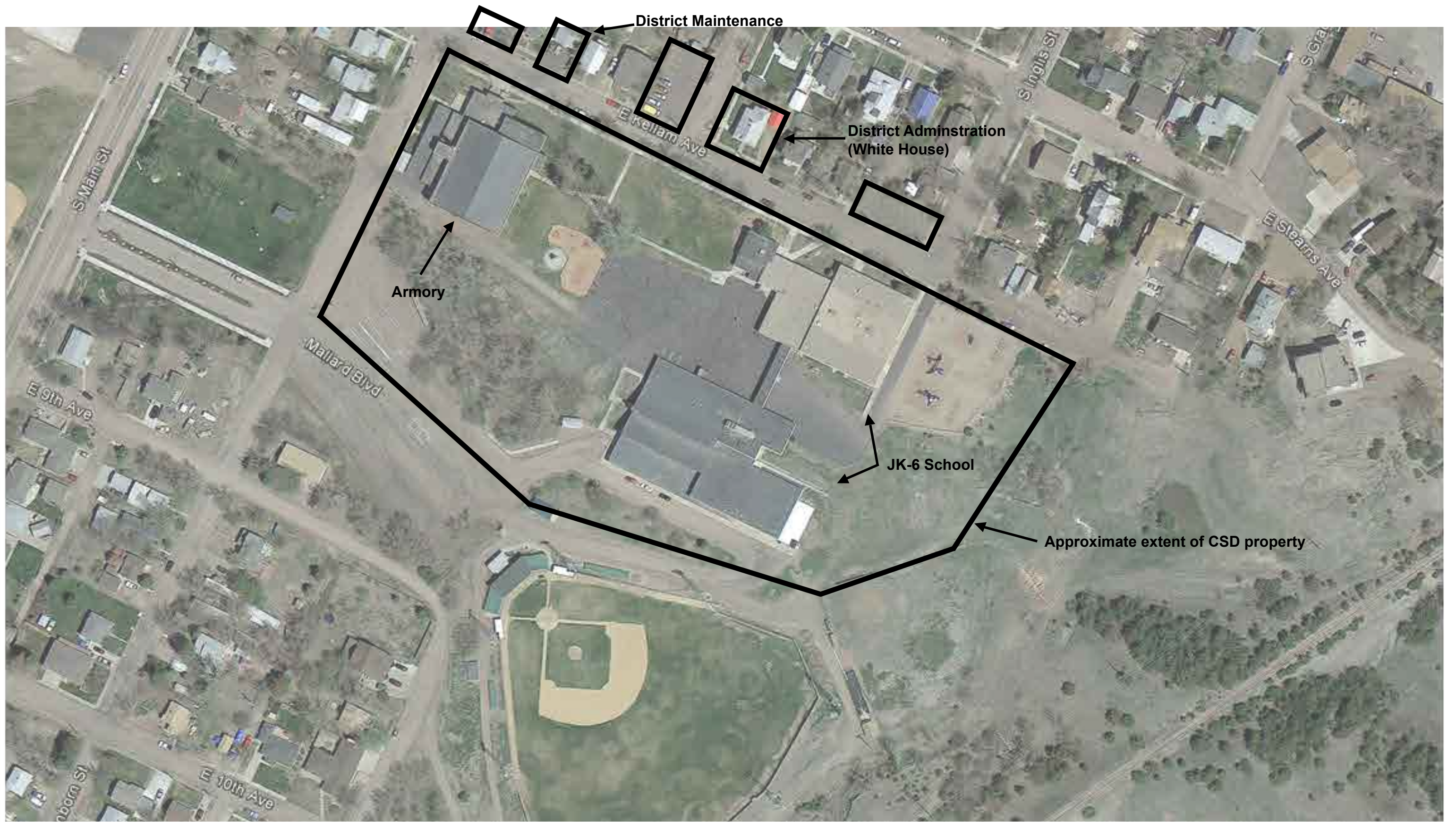


JK-6 School
Armory
Admininstration Services



7-12 School





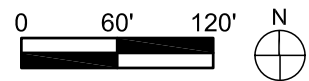


204 spaces

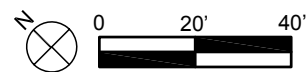
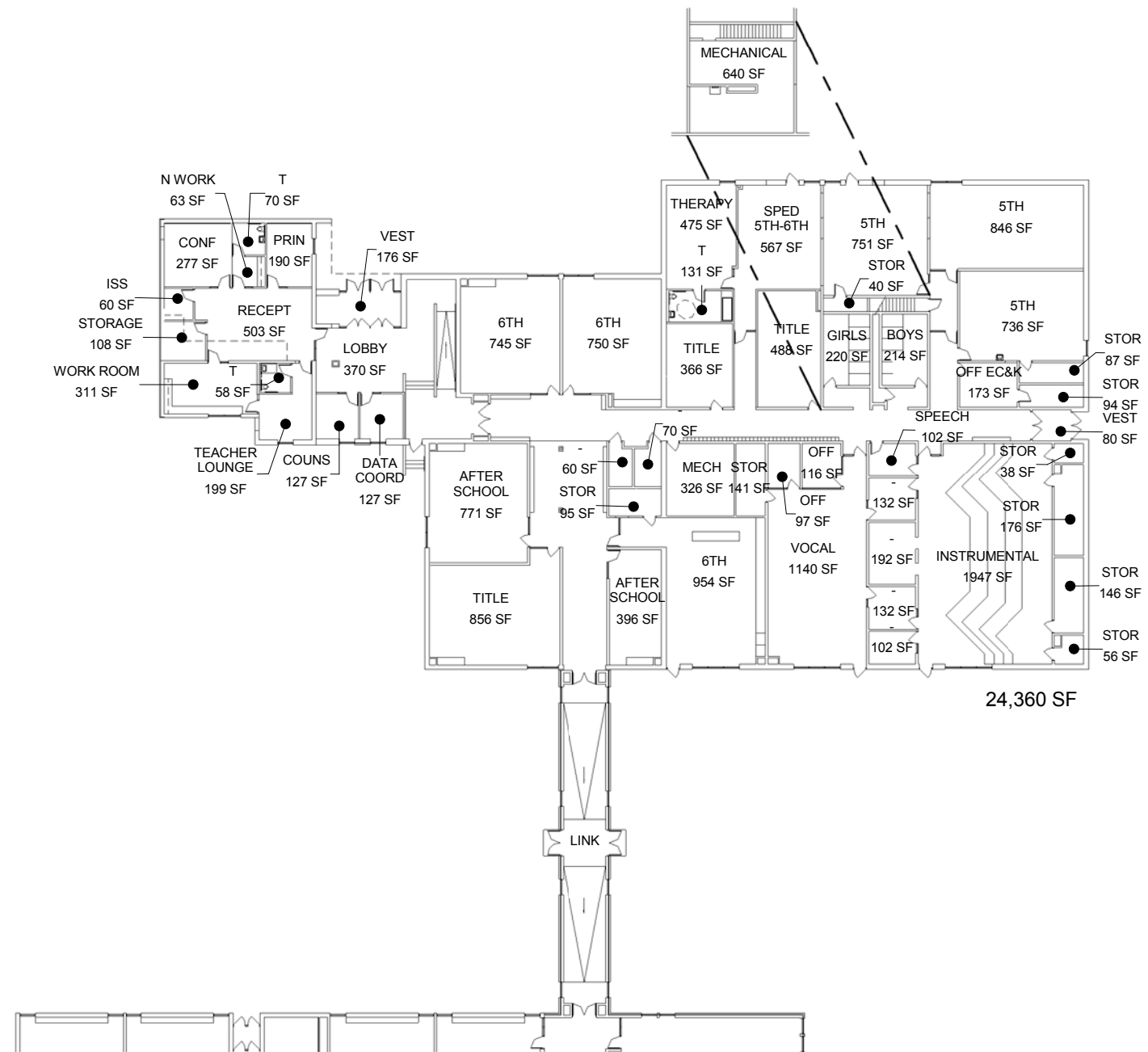
80 spaces

7-12 School

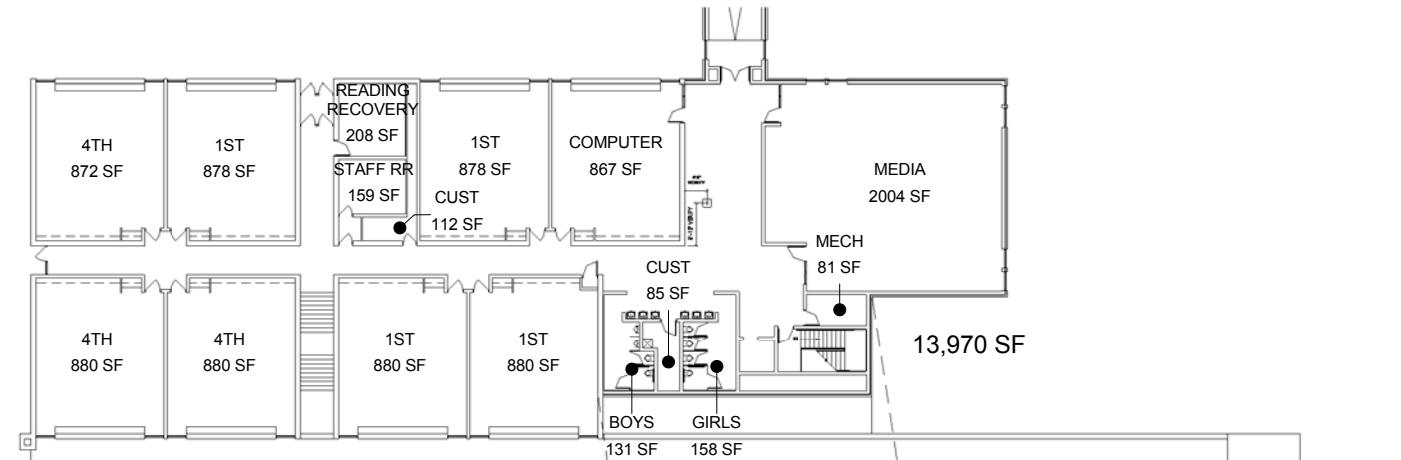
Sorensen Dr



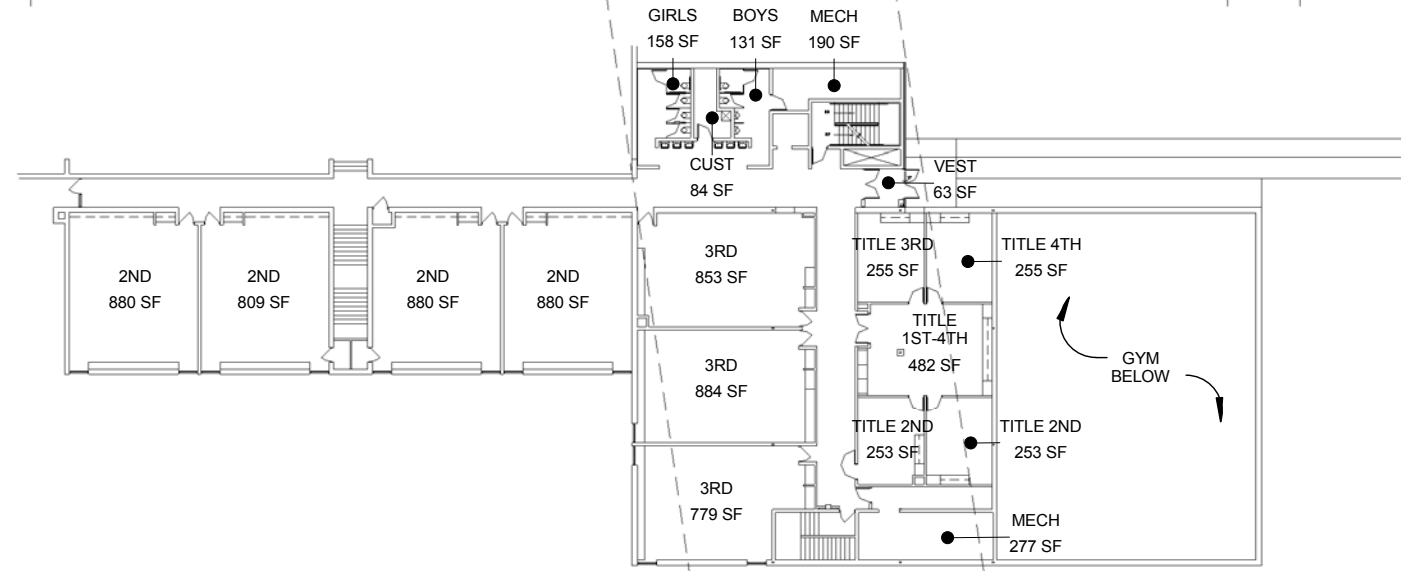
3N



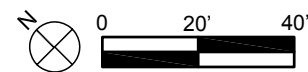
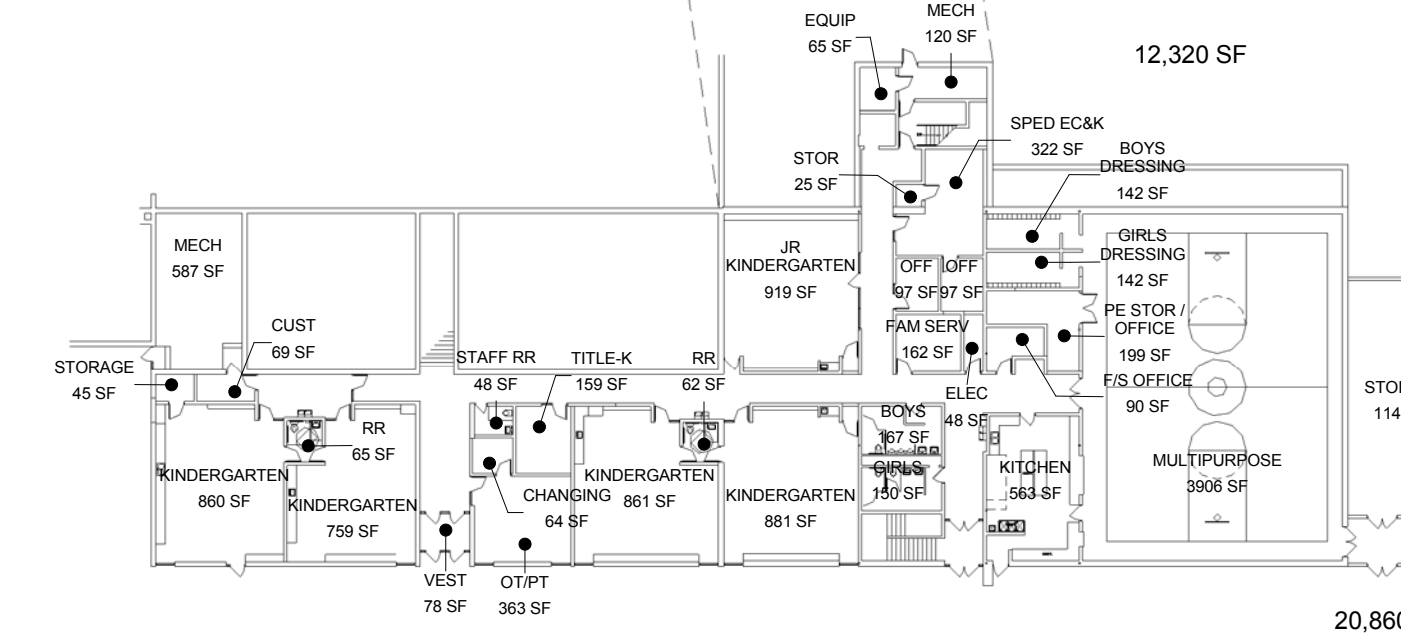
3S



2S



1S

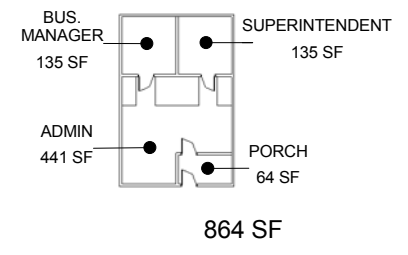
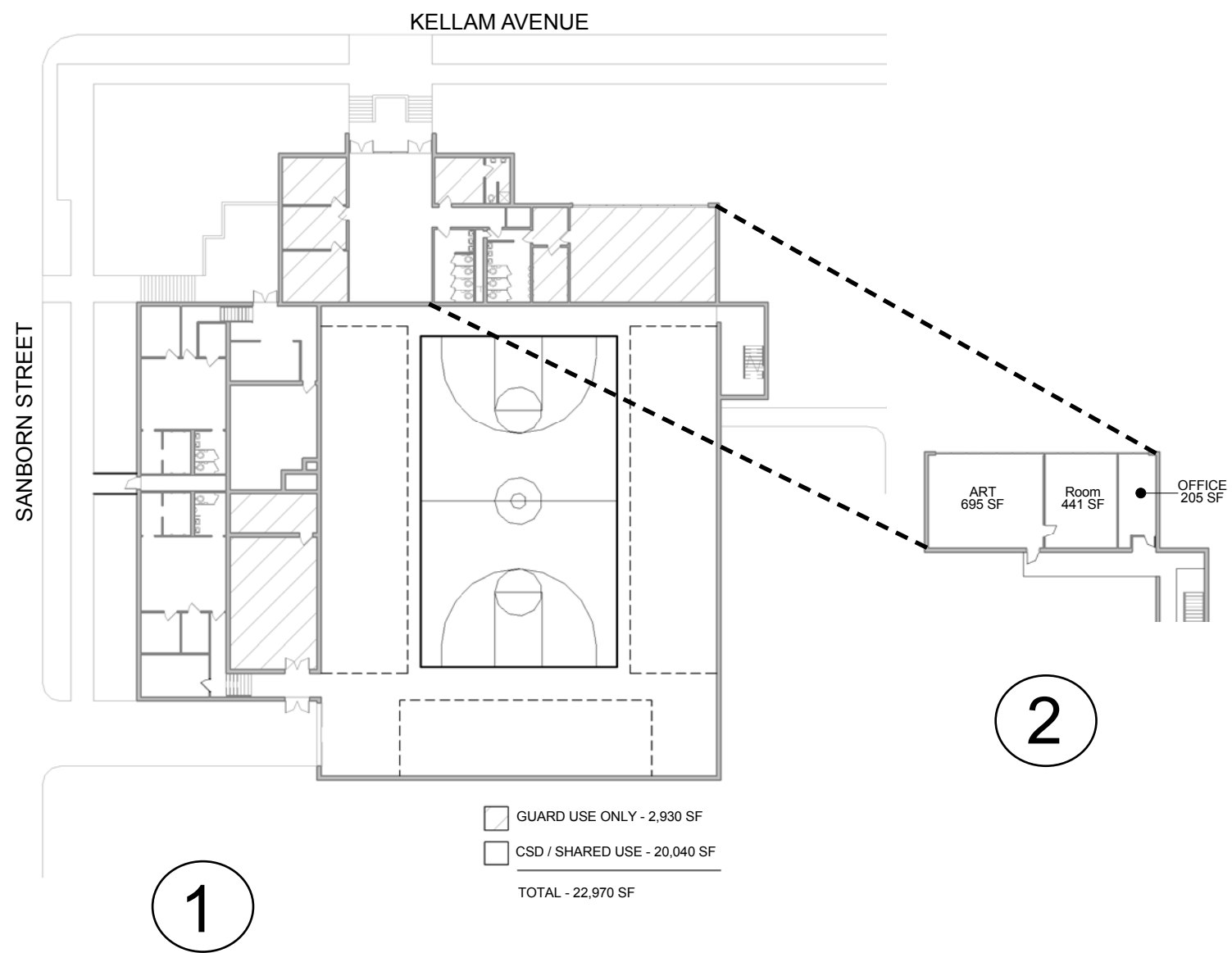


JK-6 Facility Capacity

	Classroom Quantity	Target Capacity/ Classroom	Student Capacity
JK	1	16	16
K	4	20	80
1	4	20	80
2	4	20	80
3	3	23	69
4	3	23	69
5	3	23	69
6	3	24	72
TOTAL	25		535

JK-6 Facility - Space Analysis

Level	SF
1S	20,860
2S	12,320
3S	13,970
3N	24,360
Total Area	71,510 sf
Student Capacity	535 students
Area per student	134 sf/student



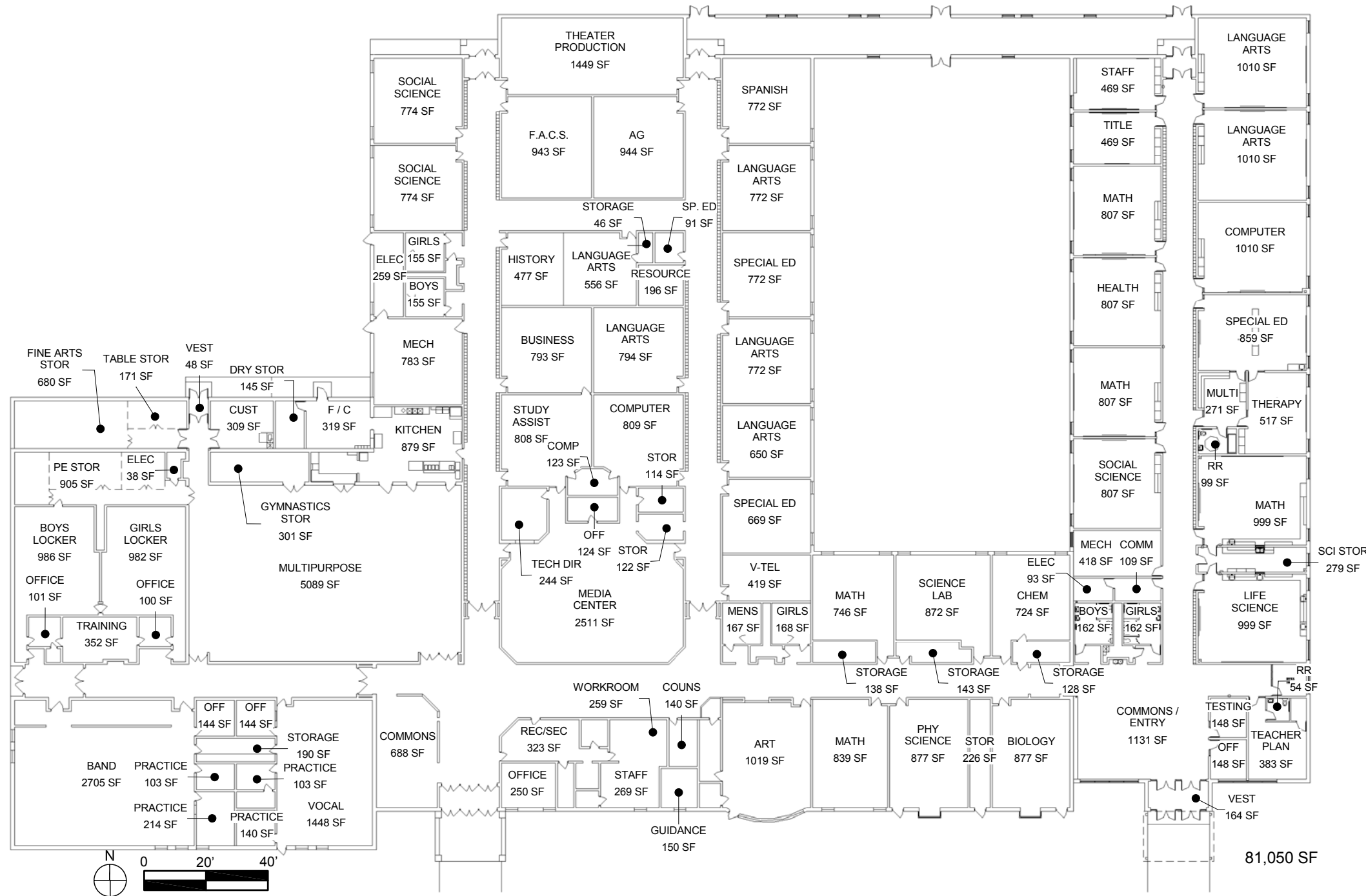
DISTRICT ADMINISTRATION FACILITY
"White House"

2





6,460 SF



7-12 Facility Capacity

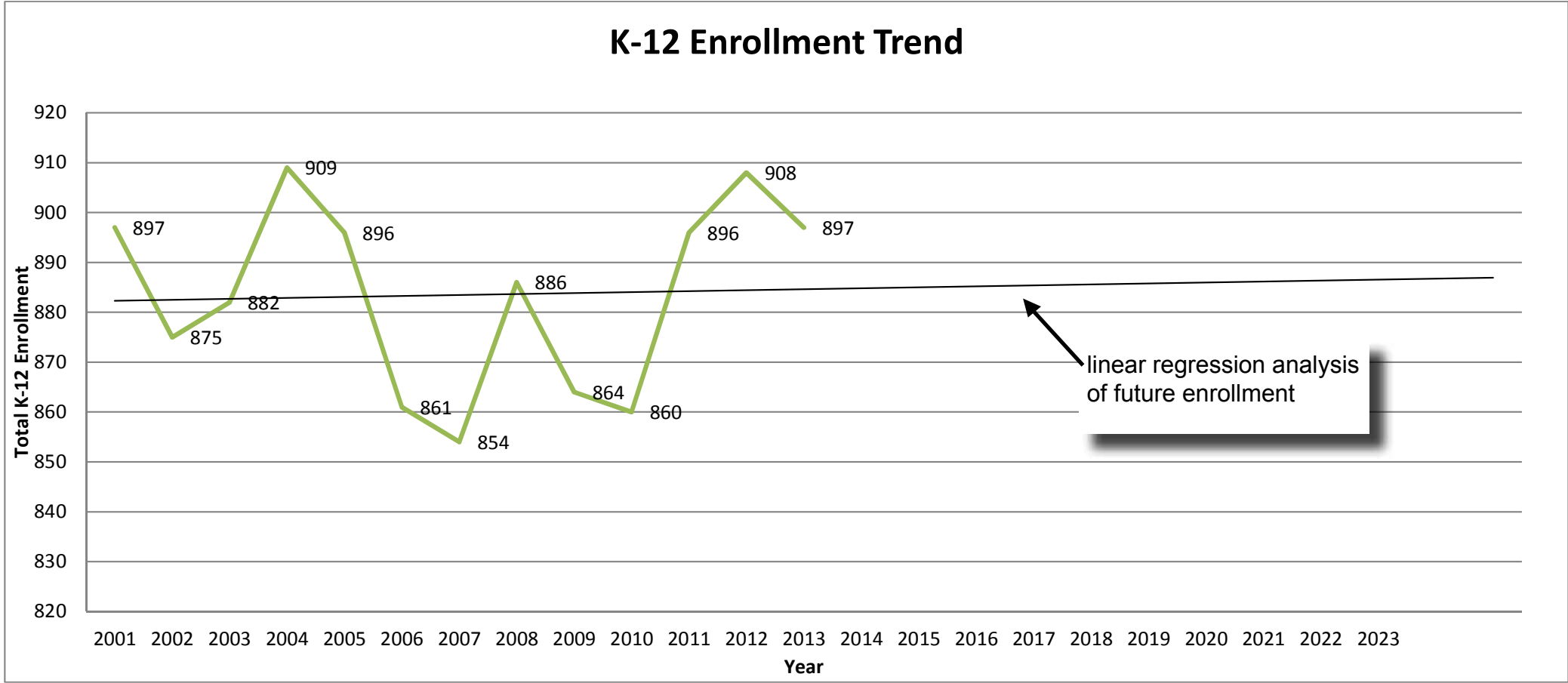
	Core Classroom Quality	Target Capacity/Classroom	Student Capacity
7-8	7	24	168
9-12	13	25	325
TOTAL	20		493

7-12 Facility-Space Analysis

7-8	19,720 sf
9-12	61,330 sf
Shop Bldg	6,460 sf
Total Area	87,510 sf
Student Capacity	493 students
Area per Student	178 sf/students

CSD Enrollment Numbers 1998-2013 (15 Years)

	K	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
2012-13	72	78	71	59	74	57	72	62	58	88	62	68	76	897
2011-12	82	75	65	77	63	70	65	64	65	73	82	72	55	908
2010-11	78	63	76	62	65	64	66	64	56	92	85	58	67	896
2009-10	63	69	60	68	63	62	64	61	58	101	75	61	55	860
2008-09	74	65	67	61	66	61	56	59	78	98	73	56	50	864
2007-08	67	72	64	67	59	61	58	79	64	99	81	52	63	886
2006-07	77	60	68	61	59	59	80	65	69	88	59	65	44	854
2005-06	60	68	62	58	55	80	65	70	61	92	79	46	65	861
2004-05	71	68	60	61	83	62	79	68	63	101	56	68	56	896
2003-04	70	59	56	88	58	75	69	66	73	85	79	61	70	909
2002-03	68	66	84	68	73	65	63	71	46	91	68	64	55	882
2001-02	60	84	63	68	59	65	74	52	73	74	82	56	65	875
2000-01	75	70	71	54	66	74	58	70	65	92	64	73	65	897
1999-00	71	75	56	74	77	62	80	69	83	72	86	69	65	939
1998-99	65	62	74	73	58	75	70	76	65	87	70	62	79	916



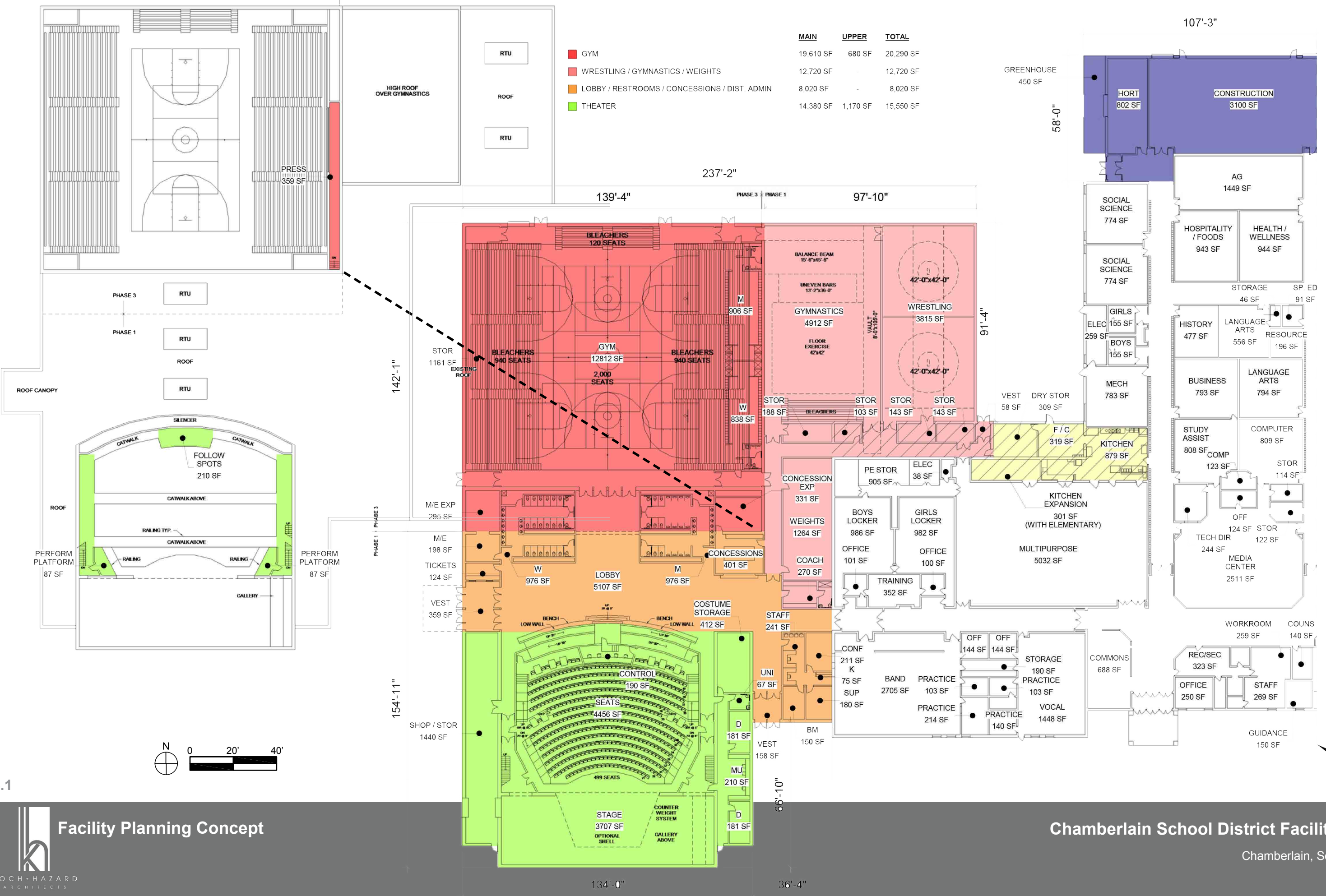
SPACE PROGRAM

04/14/14

PHASE	SECTION	SPACE	DESCRIPTION	NET AREA	QUANTITY	TOTAL NET	COMMENTS		
Phase 1	CTE Academy	Construction		3,100	1	3,100			
		Metals		1,800	1	1,800			
		Horticulture/ Greenhouse		1,250	1	1,250			
		AG		1,450	1	1,450	Use former Theater production area		
		Health/Wellness		950	1	950	Use former AG space		
		Hospitality		950	1	950	Use former FACS space		
Phase 1	PAC	Audience Chamber	Capacity of 500 Continental seating Ave. 22" wide seats 40" row spacing Wheelchair access from audience to stage	4,400	1	4,400			
		Stage	Proscenium 20'H x 48" W 33" behind proscenium 10" in from of proscenium	3,600	1	3,600			
		Control		190	1	190			
		Scene Shop/ Storage		1,500	1	1,500			
		Costume Storage		360	1	360			
		Dressing		200	2	400			
		Make-Up		200	1	200			
		Backstage Unisex Restroom		60	1	60			
		Tickets	2-3 windows	160	1	160			
		Concessions	20' window	500	1	500			
		Public Restrooms	7 fixtures	360	2	720			
		Phase 1	Athletics Training	Weights		1,400	1	1,400	
				Gymnastics	Floor exercise 42' x 42' Vault 8' x 105' Uneven bars 13'2" x 36' Balance beam 15'-6" x 45'-6" Bleachers capacity 120	4,900	1	4,900	
Wrestling	2- 42' x 42' wrestling mats Bench/Equipment area			3,800	1	3,800			
Coach/Officials Room	Work counter Toilet/shower			200	1	200			
Administration	Waiting/Staff			2 Staff, 4 Seats	280	1	280		
Phase 1	Administration	Conference	Capacity 12	260	1	260			
		Kitchenette		60	1	60			
		Business Manager		150	1	150			
		Superintendent		180	1	180			
		Phase 2	6th Grade	6th Grade Classroom		800	3	2,400	
6th Grade Science				1,000	1	1,000			
Restroom/Mechanical	Boys & girls, 4 fixtures each Janitor closet and mechanical			760	1	760			
Phase 3	Gym	Gym	Regulation High School Basketball Court @ 50' x 84' Bleacher seating for 2,000	12,400	1	12,400			
		Athletic Lockers	40 Athletic Lockers Restrooms, Showers	1,050	2	2,010			
		Public Restrooms	Addition of 14 fixtures each to Phase 1 restrooms for a total of 21 fixtures each	480	2	960			
		Concessions	Addition to Phase 1 Concession	200	1	200			



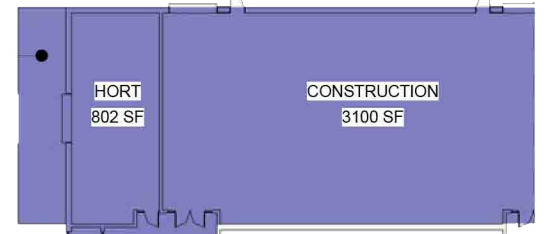
PHASE 3 PHASE 1



MAIN	UPPER	TOTAL
19,610 SF	680 SF	20,290 SF
12,720 SF	-	12,720 SF
8,020 SF	-	8,020 SF
14,380 SF	1,170 SF	15,550 SF

- GYM
- WRESTLING / GYMNASTICS / WEIGHTS
- LOBBY / RESTROOMS / CONCESSIONS / DIST. ADMIN
- THEATER

GREENHOUSE
450 SF



107'-3"

58'-0"

237'-2"

139'-4"

97'-10"

142'-1"

PHASE 1 | PHASE 3

154'-11"

134'-0"

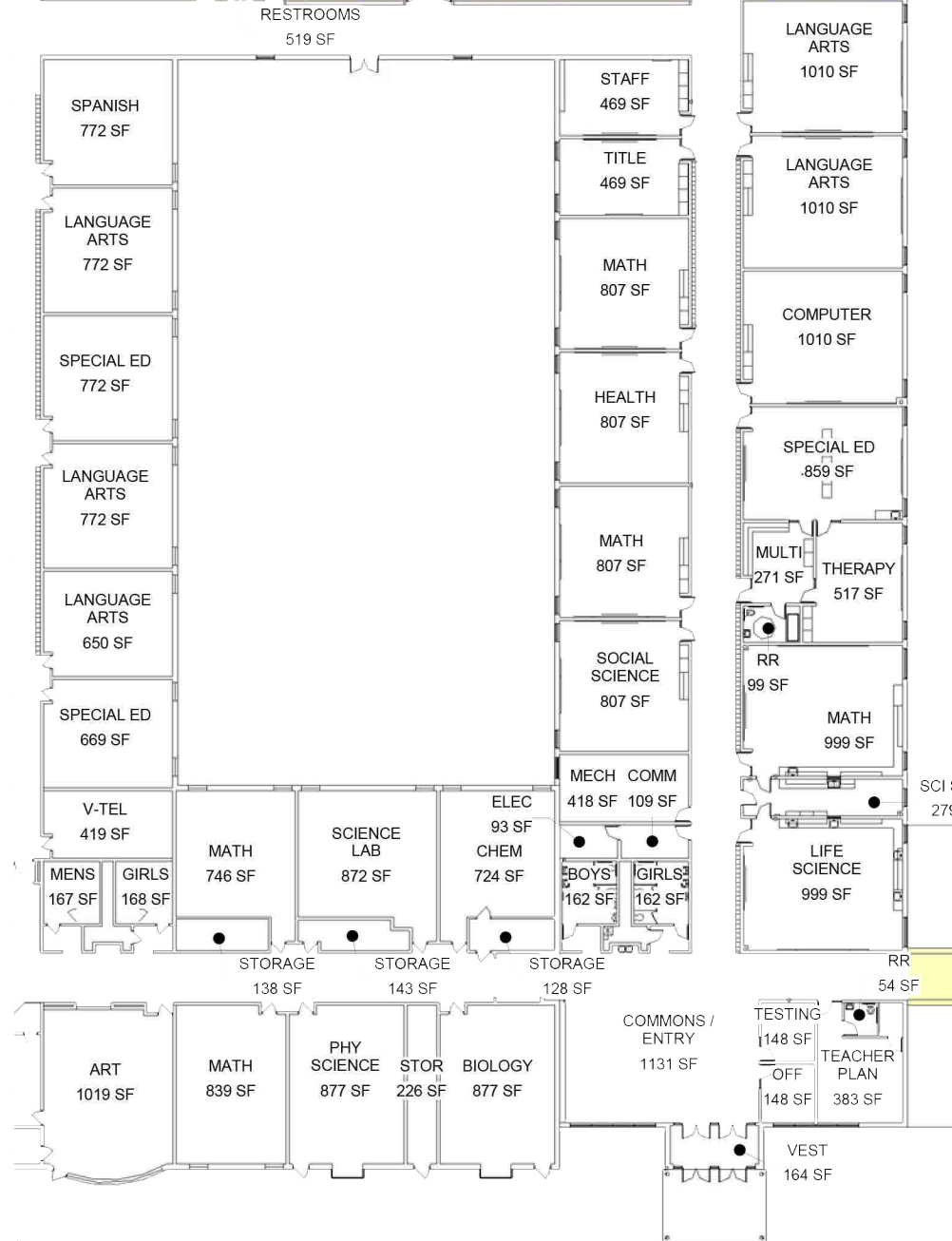
66'-10"

36'-4"

MATCHLINE

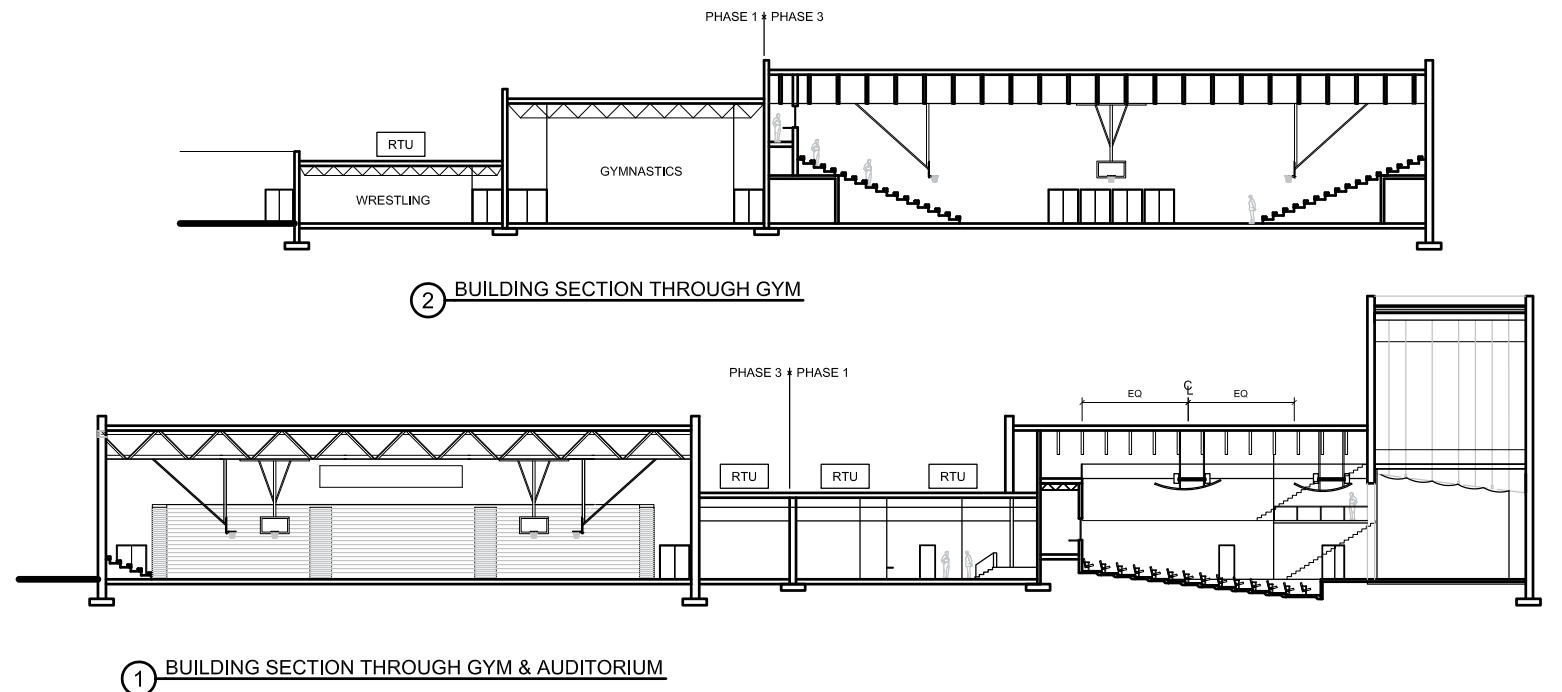
5.1

195'-7"

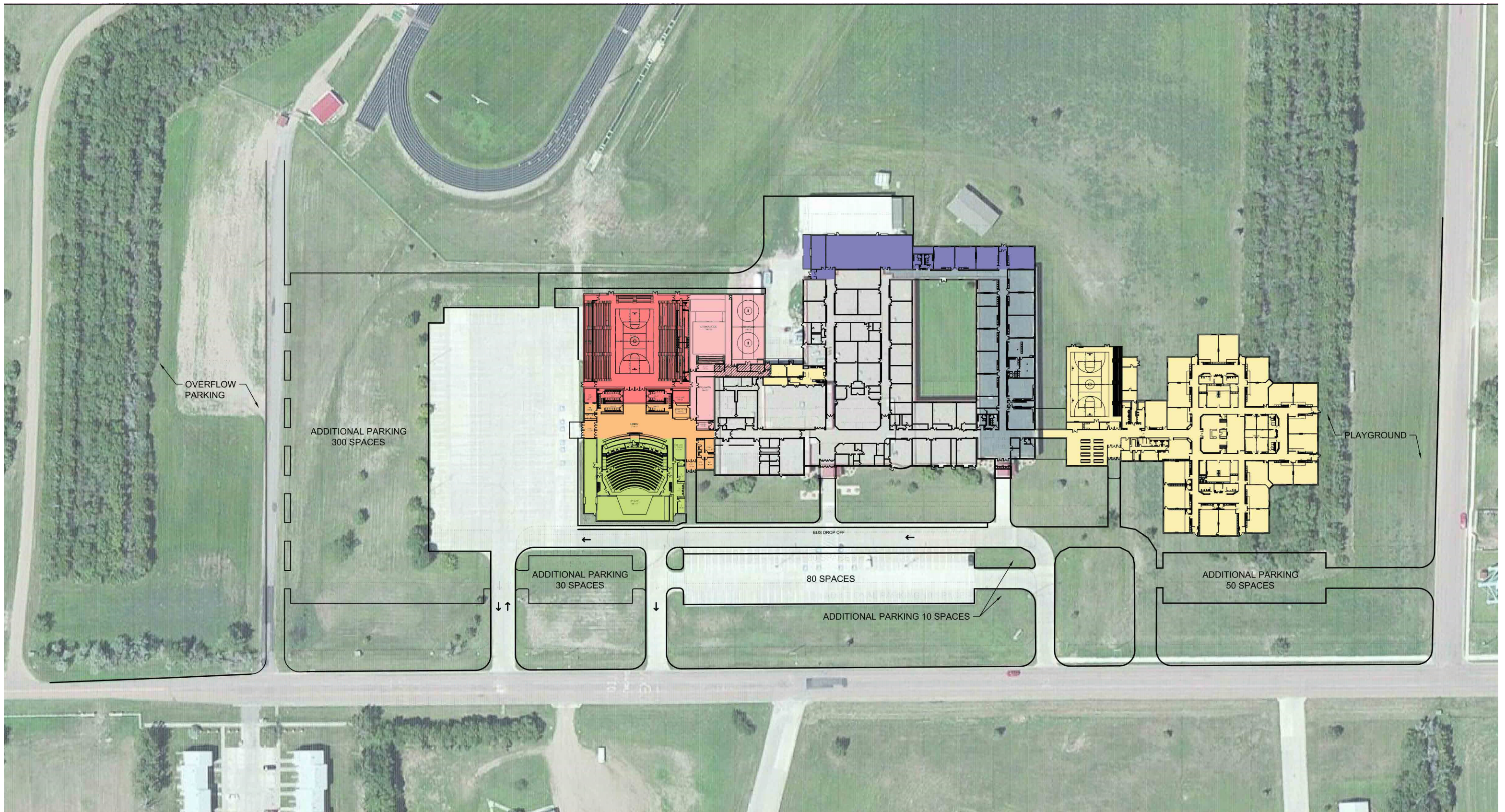


EXISTING	81,050 SF
6TH GRADE / RESTROOMS	4,830 SF
CTE ACADEMY	6,850 SF
ELEMENTARY	59,000 SF

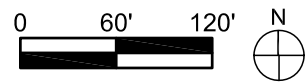
MATCHLINE



This is an example layout only - based on CSD JK-5 needs



5.3



Phasing Concept

Phase	Description	Approximate Area (sf)	Approximate 2014 Cost	Target Timing
1a	CTE Academy	6,850	7,548,000	2014-2016
1b	PAC (+District Administration)/Lobby/Restrooms/Concessions	23,570		
1c	Athletics Training	12,720		
2	Move 6th Grade to Middle School	4,830	816,000	2020-2022
3	Gymnasium/Locker Rooms/Additional Parking (330 spaces)	20,290	4,312,000	2025-2027
Future	New Elementary	59,000	9,500,000	TBD

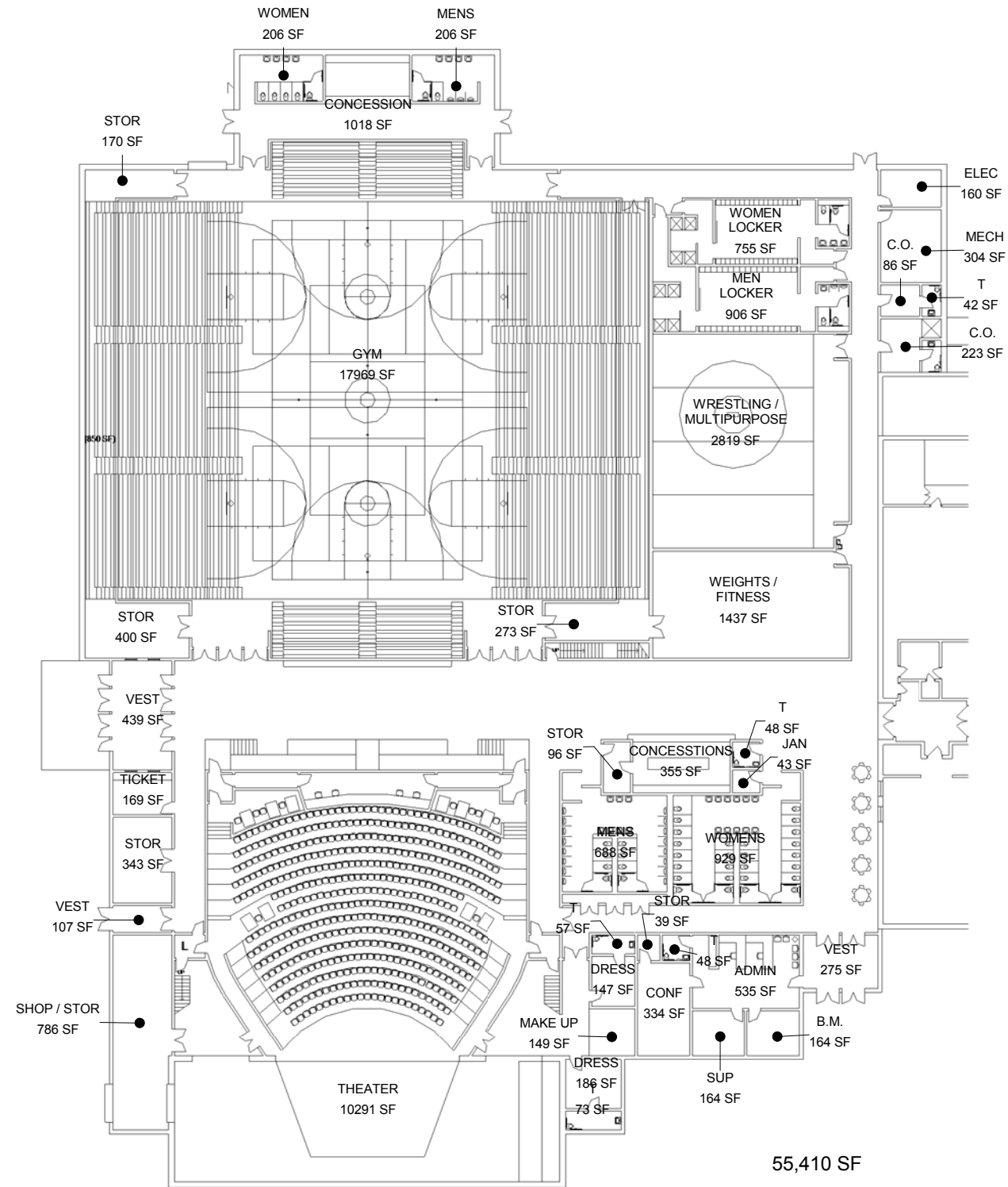
BUDGETING CONCEPT ⁽¹⁾ - PHASE 1

Site	Allowance	75,000
Construction - CTE Academy	6,850 s.f. @ \$130/s.f.	891,000
Construction - PAC	23,570 s.f. @ \$158/s.f.	3,724,000
Construction - Wrestling/Weights/Gymnastics	11,450 s.f. @ \$130/s.f.	1,494,000
Renovation - Wrestling/Weights/Gymnastics	1,230 s.f. @ \$65/s.f.	80,000
Demolish Shop Building	By Volunteers	0
Construction Reserve	3%	188,000
Subtotal Construction		6,452,000
FF&E - CTE Equipment	Not Included	0
FF&E - PAC Seating	500 seats @ \$320 ea.	160,000
FF&E - PAC Rigging	16 counterweight line sets	200,000
FF&E - PAC Acoustic Shell	Not Included	0
FF&E - PAC Performance Lighting	48 dimmers and 50 instruments	180,000
FF&E - PAC Sound System	Allowance	120,000
FF&E - Wrestling/Weight/Gymnastics Equipment	Not Included	0
Subtotal FF&E		660,000
Total Construction + FF&E		7,112,000
A/E Services	5.5% of Construction & FF&E	391,000
Survey/Geotechnical/Testing/Miscellaneous	Allowance	45,000
Subtotal Other		436,000
TOTAL PROJECT		\$7,548,000

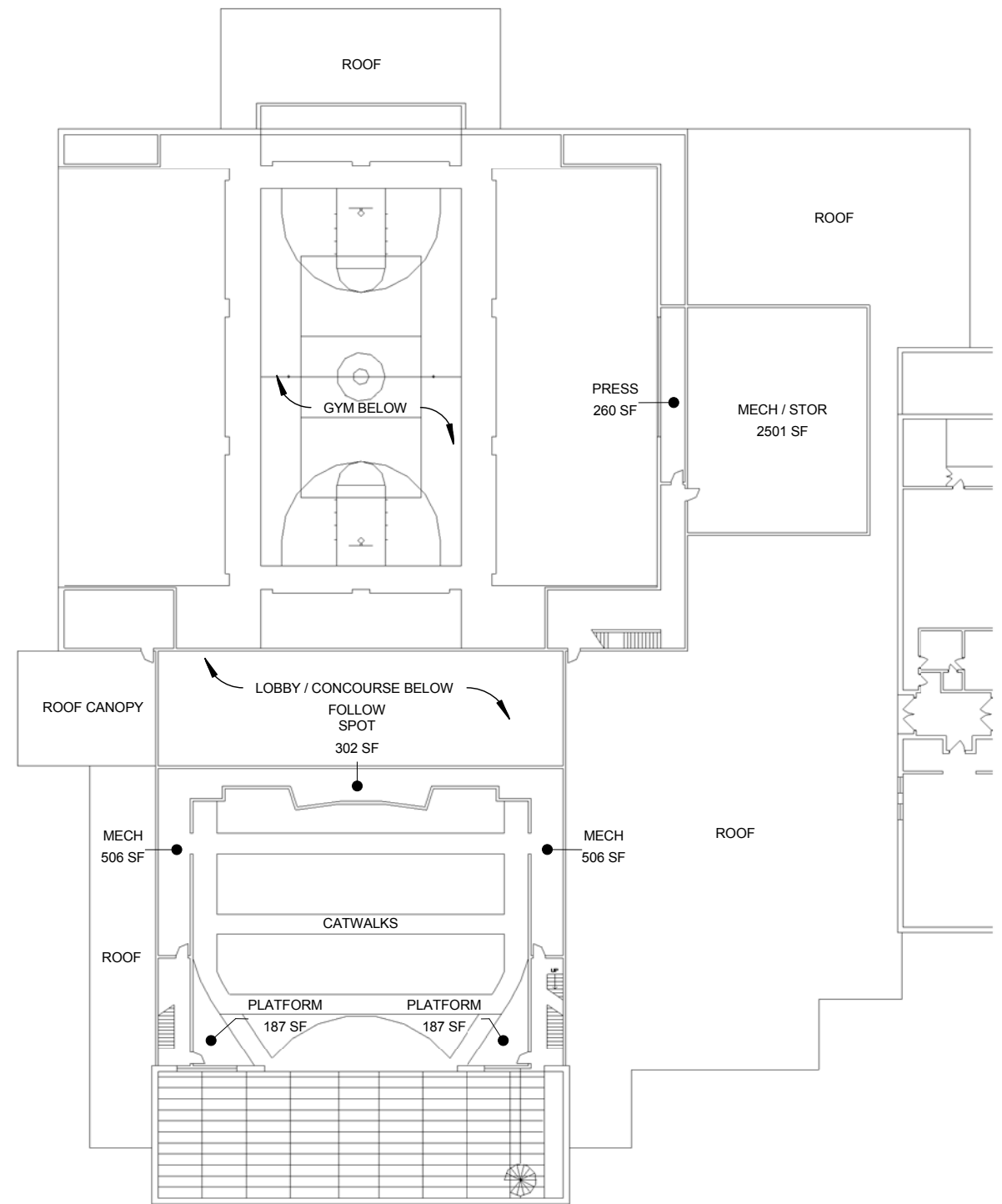
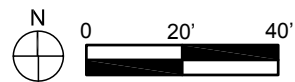
⁽¹⁾ Based on bidding in 2014 - Add 6-8% for each year construction is postponed.

FUNDING CONCEPT - PHASE 1

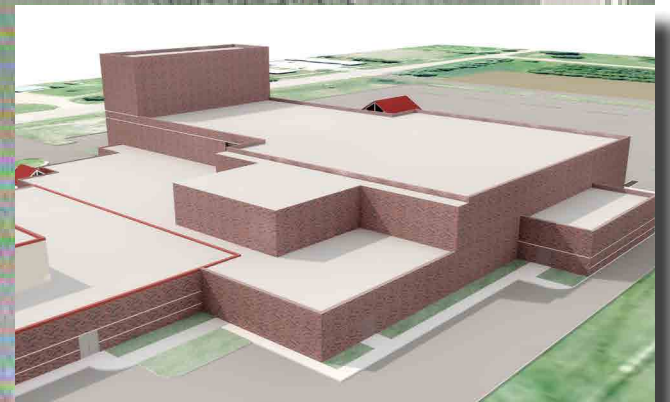
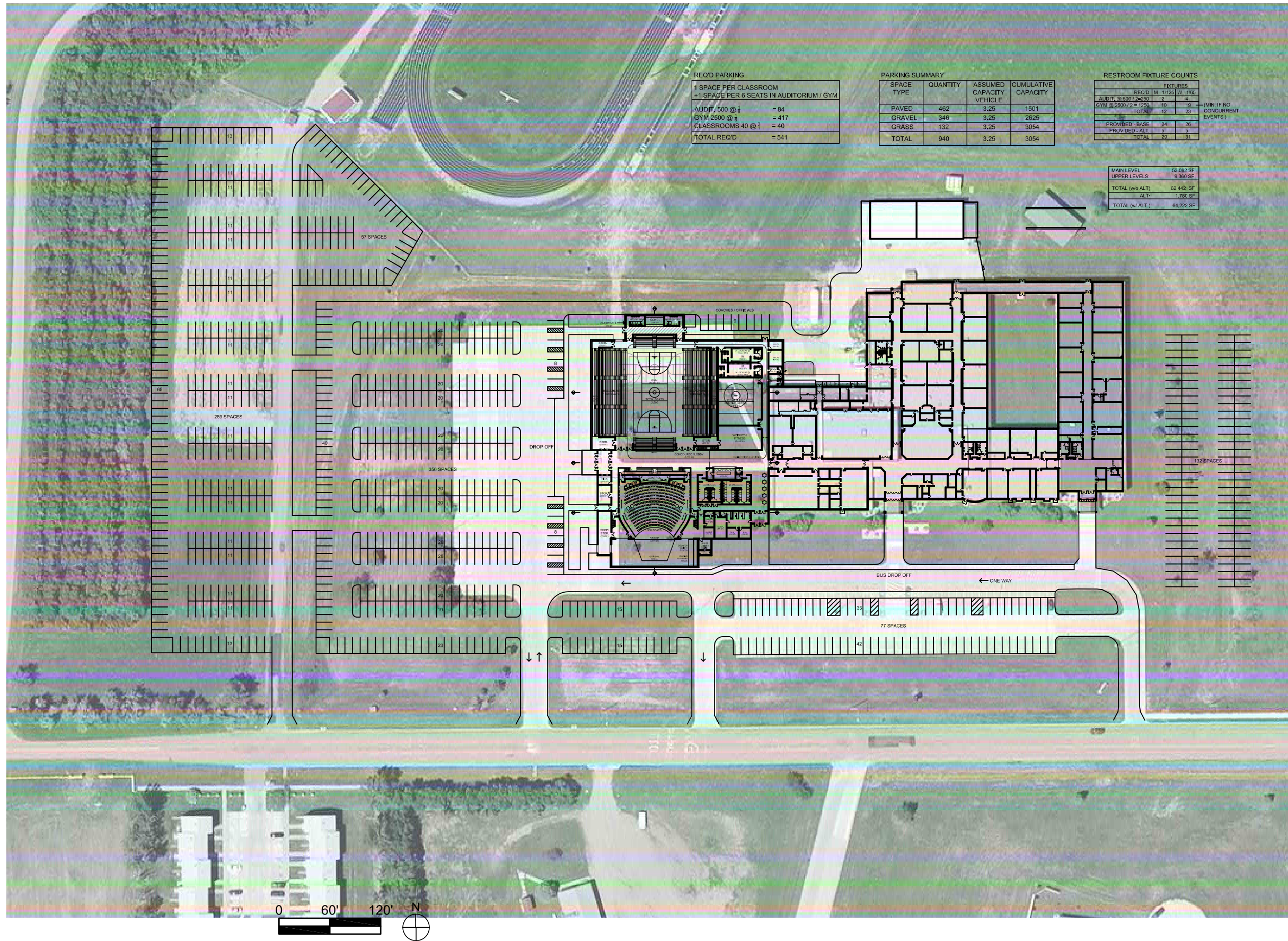
Capital Outlay (15 yr. total)	\$3,500,000
Cash Reserve (Fine Arts Center)	1,000,000
Impact Aid Funds	600,000
Barger Foundation Funds (10 yr. total)	1,250,000
Private Funding	1,200,000
TOTAL	\$7,550,000

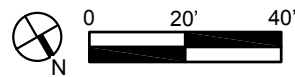
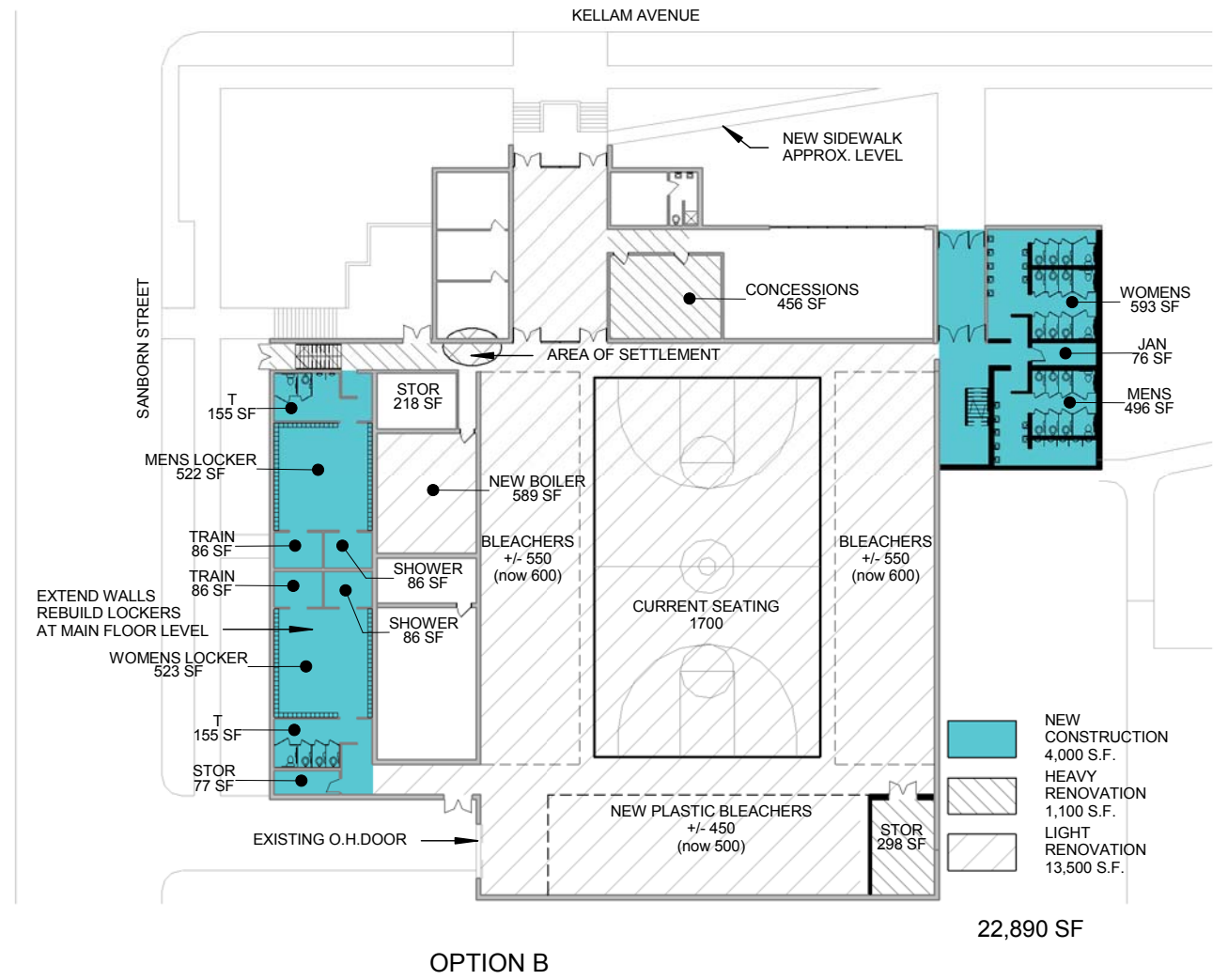
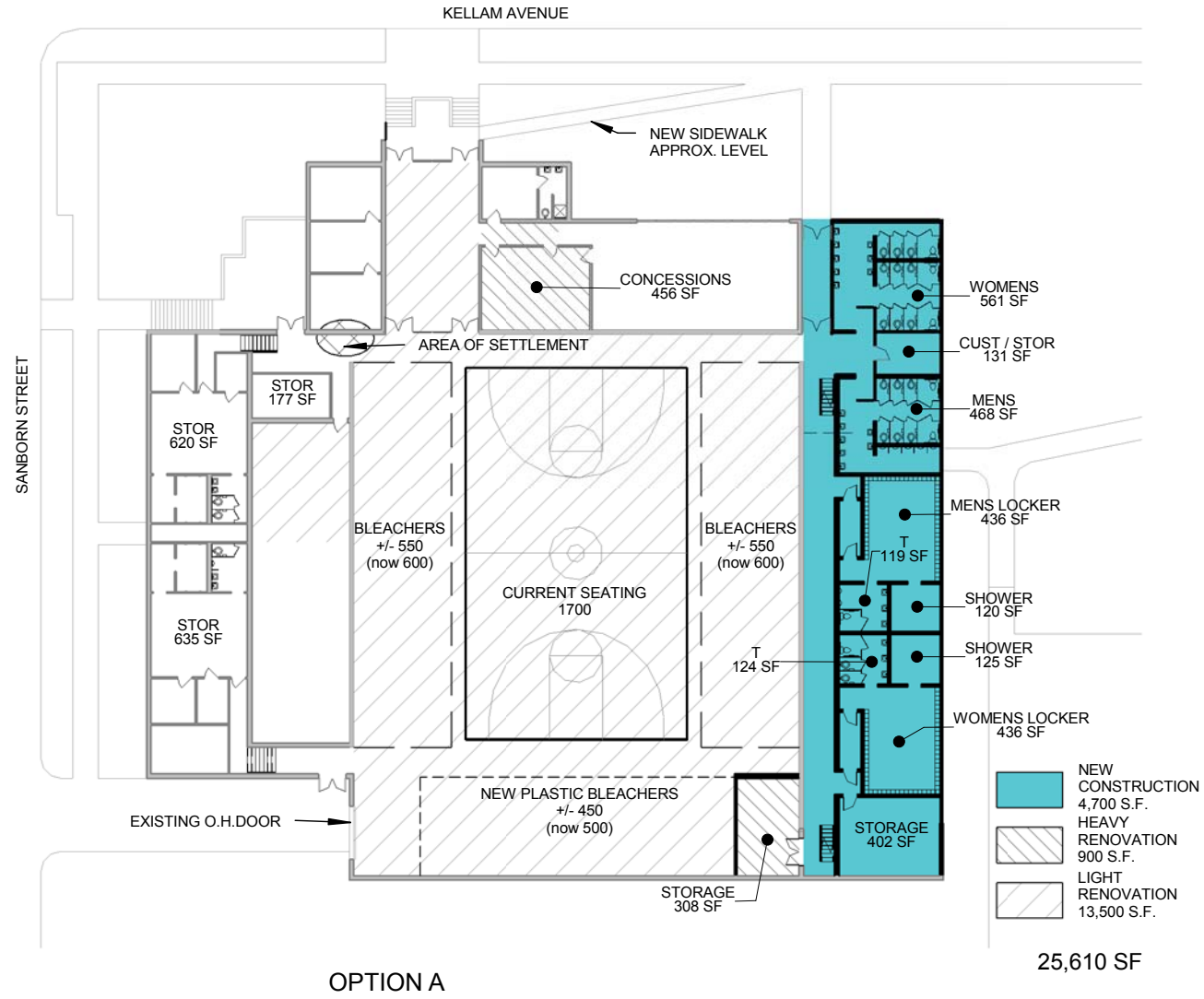


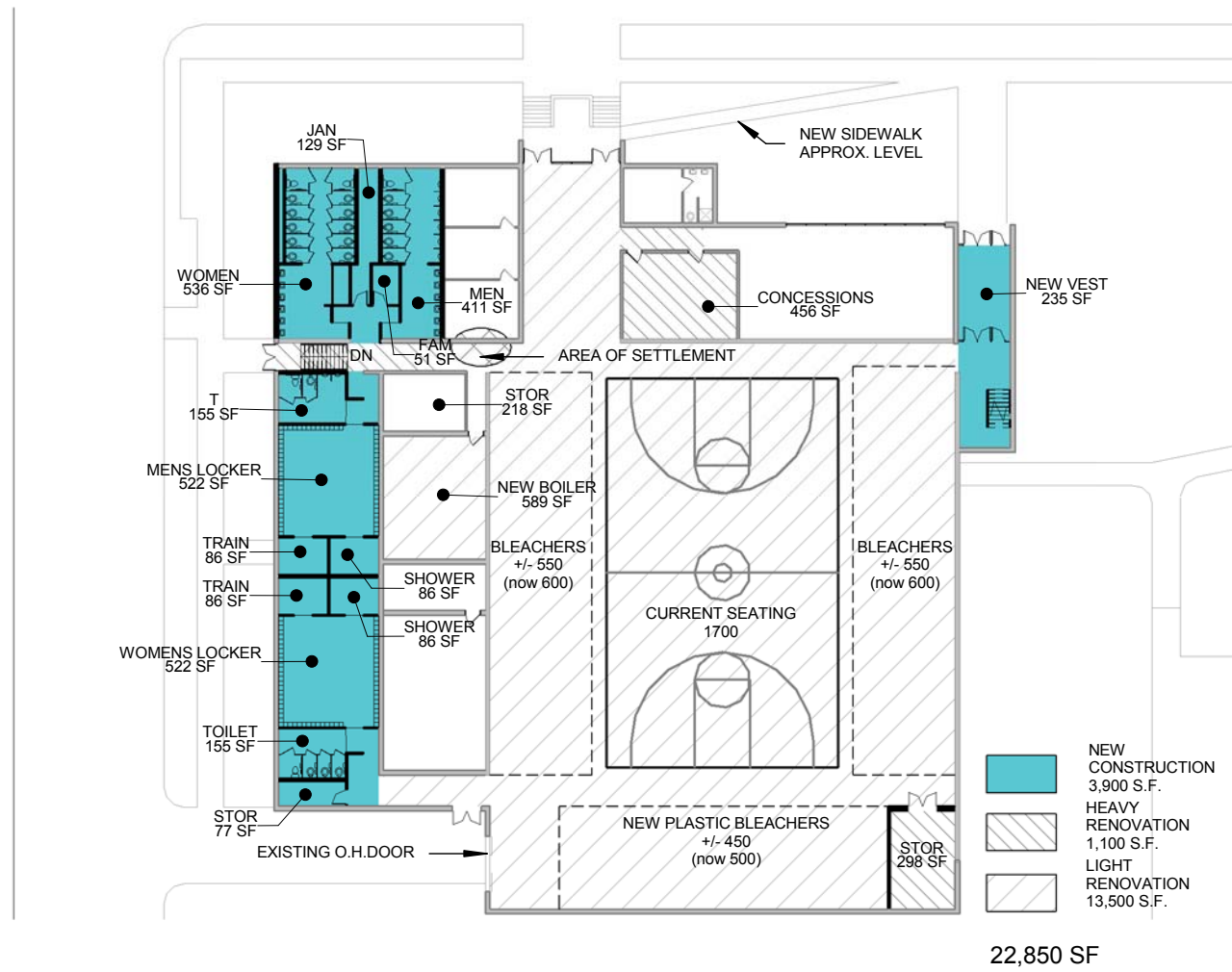
MAIN LEVEL



UPPER LEVEL







OPTION C

